

# Chapter 3

## Management Prescriptions



Cover photo: One of many springs on the Mark Twain National Forest, USDA Forest Service

Photographer: Lori Wilson

## Chapter 3

# Management Prescriptions

### Introduction

Management prescriptions provide direction to help achieve goals and objectives expressed at the forestwide level. Management prescriptions define where differing types of opportunities and experiences are available to the public, and where differing management practices may be carried out. They identify proposed and probable practices and actions appropriate to achieve the desired conditions. All management prescriptions provide multiple uses, even though their titles may imply a single use.

This chapter presents each management prescription separately. A specific resource not addressed in a management prescription indicates that the Forestwide Standards and Guidelines provide adequate direction. In addition, Federal and State laws, regulations, and the Forest Service Directives System always apply, although they are not specifically identified in management prescription direction.

Each management prescription includes the following elements:

**Theme** – a short summary of management emphasis.

**Goals** – concise statements that describe the primary purpose or aim for the management prescription. Goals are broad and general in scope with no specific timeframe.

**Desired Condition** – a narrative description of the desired characteristics and conditions expected because of the prescribed management. They provide a snapshot of what the forest or management area will look like when goals, objectives, standards, and guidelines are met. Desired conditions can apply to the present or the future and do not consider costs.

**Standards and Guidelines** – direction that applies to a particular management prescription, in addition to the Forestwide Standards and Guidelines. Where Forestwide standards and guidelines are different from those for a management prescription, the management prescription standard applies.

The revised Forest Plan includes nine management prescriptions. These management prescriptions achieve a desired future forest condition with resulting outputs of goods, services, uses, and environmental enhancements. They are specifically designed to respond to the issues and need for change items identified through the plan revision process.

Management prescriptions are applied to geographical units on the ground, which are called Management Areas. Management prescriptions typically apply to more than one management area, in multiple locations, on the Forests.

The following table shows the management prescription assignments in terms of thousands of acres and percent of Forest. They are based on mapped GIS acreages for each management area, using 2004 ownership. Forest Plan maps for each unit showing the location of the management areas are located in Appendix H.

**Table 3-1. Management prescription assignment of Forest Plan.**

Management Prescription	Total Acres (in 1000s)	Percent of NFS Lands
1.1 Natural Community Restoration, Rooded Natural ROS	**374.9**	25.1
1.2 Natural Community Restoration, Semi-Primitive Motorized ROS	62.2	4.2
2.1 General Forest, Rooded Natural ROS	**669.8**	44.8
5.1 Designated Wilderness, Primitive ROS	64.1	4.3
6.1 Semi-Primitive Non-Motorized ROS	**74.0**	4.9
6.2 Semi-Primitive Motorized ROS	196.4	13.1
6.3 Candidate Wild, Scenic, Recreation Rivers	**16.9**	**1.1**
7.1 Developed Recreation Areas	5.9	0.4
8.1 Designated "Special Areas" Other Than Wilderness	**31.9**	**2.1**
Total	1,496.1	100.0

## Management Prescription 1.1

### Natural Community Restoration, Roded Natural ROS

#### Theme

This prescription emphasizes restoration of natural communities while providing a roded natural recreation experience. MP 1.1 consists of biologically distinctive ecological areas, each differing with respect to flora, fauna, natural communities, watersheds, and landform. The desired condition will vary based on the characteristics of respective natural community types as described for each management area. The intensity of natural community management may vary according to resource quality and type, access, land ownership patterns and capability to respond to management activities.

#### Goals

- Focus restoration efforts in areas that collectively represent irreplaceable concentrations of distinctive biota, and that represent the highest quality natural communities in Missouri.
- Restore, enhance and maintain the structure, composition and function of distinctive terrestrial and aquatic natural communities.
- Restore the ecological role of fire in natural communities.
- Provide a variety of uses, products and values by managing in support of desired ecological conditions.

#### Desired Condition

Ecosystems are healthy, resilient, and resistant to diseases, insect infestations, and non-native species invasion. Natural communities are present in the amounts, distributions, and variability characteristic of Missouri's presettlement landscape. Management activities mimic natural patterns and the range of variability of resident natural communities, resulting in a natural-appearing landscape. Additional information is found in Appendix A.

Plant species distributional patterns, abundance, and diversity increase following management activities. Natural communities exhibit the desired composition, patch size, canopy structure, understory, shrub layer, and ground cover characteristics.

Prescribed fire emulates historical fire regimes, creating variable patterns of vegetation structure and abundance that meet habitat needs for associated wildlife.

#### Standards and Guidelines

##### Vegetation Management

**Distribute activities across the landscape to emulate the historical vegetation patterns and quantities of natural communities based on available information.**

**Emphasize treatment of under-represented natural communities as described in Appendix A for each individual management prescription 1.1 areas.**

On isolated tracts or in areas with low potential for ecological restoration, emphasize production of timber resources rather than ecological restoration.

Provide a gradual transition in vegetation density and composition from one stand to the next when possible.

When seeding or planting vegetation other than shortleaf pine is prescribed for restoration, use seed or plant materials from local sources unless a local source is not available or cannot be developed. If a local seed source is not available, a botanist or ecologist must approve the seed source.

**Remove, control, or contain occurrences of non-native invasive species in existing native prairies upon discovery and in other natural communities as feasible.**

### **Terrestrial and Aquatic Habitat Management**

**Distribute activities across the landscape so that the full range of variable conditions (from regeneration openings to areas exhibiting old growth characteristics) is present for each natural community.**

The predominant age of areas representing old growth character should be greater than 25% above the rotation age used for timber management.

**New wildlife waterholes shall only be constructed if site-specific analysis demonstrates a long-term, landscape-level viability concern for TES, RFSS, or species groups (such as herptofauna), and such concerns cannot be addressed through waterhole construction in other areas of the Forest (i.e., 2.1 Management Prescription).**

**No new wildlife food plots shall be created.**

**Close and rehabilitate existing wildlife food plots.**

### **Rangeland Management**

**Permit grazing only on existing improved pastures. Pastures on lands acquired in the future may be grazed only after an analysis comparing the suitability for grazing and the potential to contribute to natural community restoration.**

**Control timing, duration, and intensity of livestock grazing to achieve desired structure and species composition.**

**Ensure that timing, intensity and frequency of grazing maintains and/or increases sensitive plant species populations and rare plant communities.**

**Close all areas that contain glade and natural woodlands when the current permit expires. Until the permit expires, control the timing, duration, and intensity of livestock grazing to achieve desired structure and species composition objectives.**

### **Recreation Management**

#### **Recreation Opportunities**

**Manage area to meet, as a minimum, roaded natural ROS objectives.**

### **Visual Management**

**All resource management activities shall meet, as the minimum, the Visual Quality Objectives displayed below:**

**Table 3-2. Visual Quality Objective for Management Prescription 1.1.**

	Sensitivity Level and Distance Zone						
	Most Sensitive		Sensitive		Least Sensitive		
Variety Class	fg1	mg1	bg1	fg2	mg2	bg2	3
Distinctive-Class A	R	PR	PR	PR	M	M	M
Common-Class B	PR	M	M	PR	M	MM	MM
Minimal-Class C	PR	M	M	M	MM	MM	MM

*Distance Zones: fg-foreground; mg-middleground; bg-background*

*VQO: R-Retention; PR-Partial Retention; M-Modification; MM-Maximum Modification*

## Timber Management

The following rotation ages should normally apply:

- 100 years for shortleaf pine;
- 120 years for post and white oak; and
- 80 years for red, black, and scarlet oak.

Even-age silvicultural methods may be used to restore and maintain open natural communities, glades and savannas by creating forest openings greater than 40 acres, but not to exceed 500 acres\*,\* within the Ava, Cassville, Houston, Rolla, and Willow Spring units.

## Landownership

### Land Adjustments

Priority in land adjustments should be given to consolidating land and filling inholdings with emphasis given to protecting riparian zones in emphasis watersheds, high integrity natural communities and simplifying prescribed burn units.





## Management Prescription 1.2

### Natural Community Restoration, Semi-Primitive Motorized ROS

#### Theme

This prescription emphasizes restoration of natural communities while providing semi-primitive motorized dispersed recreation experiences. MP 1.2 consists of biologically distinctive ecological areas, each differing with respect to flora, fauna, natural communities, watersheds, and landform. The desired condition will vary based on the characteristics of respective natural community types as described for each management area. The intensity of natural community management may vary according to resource quality and type, access, land ownership patterns and capability to respond to management activities.

#### Goals

- Focus restoration efforts in areas that collectively represent irreplaceable concentrations of distinctive biota, and that represent the highest quality natural communities in Missouri.
- Restore, enhance, and maintain the structure, composition, and function of distinctive terrestrial and aquatic natural communities.
- Restore the ecological role of fire in natural communities.
- Provide a variety of uses, products, and values by managing in support of desired ecological conditions.
- Provide dispersed recreation opportunities emphasizing a semi-primitive motorized setting.

#### Desired Condition

Ecosystems are healthy, resilient, and resistant to diseases, insect infestations, and non-native species invasion. Natural communities are present in the amounts, distributions, and variability characteristic of Missouri's presettlement landscape. Management activities mimic natural patterns and the range of variability of resident natural communities, resulting in a natural-appearing landscape. Additional information is found in Appendix A.

Plant species distributional patterns, abundance, and diversity increase following management activities. Natural communities exhibit the appropriate composition, patch size, canopy structure, understory, shrub layer, and ground cover characteristics.

Prescribed fire emulates historical fire regimes, creating variable patterns of vegetation structure and abundance that meet habitat needs for associated wildlife.

The natural appearing setting has moderately dominant alterations, but these alterations do not draw the attention of motorized observers from trails or primitive roads.

#### Standards and Guidelines

##### Vegetation Management

**Distribute activities across the landscape to emulate the historical vegetation patterns and quantities of natural communities based on available information.**

**Emphasize treatment of under-represented natural communities as described in Appendix A for each individual management areas managed under prescription 1.2.**

On isolated tracts or in areas with low potential for ecological restoration, emphasize production of timber resources rather than ecological restoration.

Even-age silvicultural methods may be used to restore and maintain open natural communities, glades, and savannas by creating forest openings greater than 40 acres, but not to exceed 500 acres within the Ava, Cassville, Houston, Rolla, and Willow Spring units.

Provide a gradual transition in vegetation density and composition from one stand to the next when possible.

When seeding or planting vegetation other than shortleaf pine is prescribed for restoration, use seed or plant materials from local sources unless a local source is not available or cannot be developed. If a local source is not available, a botanist or ecologist must approve a seed source.

**Remove, control, or contain occurrences of non-native invasive species in existing native prairies upon discovery, and in other natural communities as feasible.**

### **Terrestrial and Aquatic Habitat Management**

**Distribute activities across the landscape to so that the full range of variable conditions (from regeneration openings to areas exhibiting old growth characteristics) is present for each natural community.**

The predominant age of areas representing old growth character should be greater than 25% above the rotation age used for timber management.

**New wildlife waterholes shall only be constructed if site-specific analysis demonstrates a long-term, landscape-level viability concern for TES, RFSS, or species groups (such as herptofauna), and such concerns cannot be addressed through waterhole construction in other areas of the Forest (i.e., 2.1 Management Prescription).**

**No new wildlife food plots shall be created.**

**Close and rehabilitate existing wildlife food plots.**

### **Rangeland Management**

**Permit grazing only on existing improved pastures. Pastures on lands acquired in the future may be grazed only after an analysis comparing the suitability for grazing and the potential to contribute to natural community restoration.**

**Control timing, duration, and intensity of livestock grazing to achieve desired structure and species composition.**

**Ensure that timing, intensity and frequency of grazing maintains and/or increases sensitive plant species populations and rare plant communities.**

**Close all areas that contain glade and natural woodlands when the current permit expires. Until the permit expires, control the timing, duration, and intensity of livestock grazing to achieve desired structure and species composition objectives.**

## Recreation Management

### Recreation Opportunities

Manage area to meet, as a minimum, semi-primitive motorized ROS objectives, except as noted below:

- Manage the Upper St. Francois Mountains Management Area (also known as Lower Rock Creek) to meet, at a minimum, semi-primitive non-motorized ROS objectives, except for the Wolf Hollow Area, which may be managed for semi-primitive motorized objectives. (See Fredericktown Unit Map in Appendix H for delineation of Wolf Hollow Area.)

### Recreation Management

Hold investment in recreation management to the minimum necessary to meet resource protection needs.

### Trails

Density for all types of trails should not exceed an average of 1.5 miles per square mile of National Forest System land.

## Visual Management

All resource management activities shall meet, as the minimum, the Visual Quality Objectives displayed below:

**Table 3-3. Visual Quality Objective for Management Prescription 1.2.**

	Sensitivity Level and Distance Zone						
	Most Sensitive		Sensitive		Least Sensitive		
Variety Class	fg1	mg1	bg1	fg2	mg2	bg2	3
Distinctive-Class A	R	R	R	PR	PR	PR	PR
Common-Class B	R	PR	PR	PR	M	M	MM
Minimal-Class C	PR	PR	M	M	M	MM	MM

*Distance Zones: fg-foreground; mg-middleground; bg-background*

*VQO: R-Retention; PR-Partial Retention; M-Modification; MM-Maximum Modification*

## Timber Management

The following rotation ages should normally apply:

- 100 years for shortleaf pine;
- 120 years for post and white oak; and
- 80 years for red, black, and scarlet oak.

**Schedule no more than 20% of an individual management area for timber harvest during each decade of the plan period.**

Salvage harvests are not subject to the 20% limit on timber harvest.

Even-age silvicultural methods may be used to restore and maintain open natural communities, glades and savannas by creating forest openings greater than 40 acres, but not to exceed 500 acres, within the Ava, Cassville, Houston, Rolla, and Willow Spring units.

## Special Uses

Allow the use of National Forest System lands only when subject to existing rights, within existing sites or corridors, or when no other alternative is available.

## Minerals

### Mineral Exploration

Minimize excavation at drill sites.

### Common Variety Minerals

**Permit removal of common variety minerals only from isolated, visually screened locations.**

## Landownership

### Land Adjustments

Give priority in land adjustments to consolidating land and filling inholdings with emphasis given to protecting riparian zones in emphasis watersheds, high integrity natural communities and simplifying prescribed burn units.

## Transportation System

**Manage National Forest System roads to meet, as a minimum, semi-primitive motorized ROS criteria, except as noted below:**

- **Manage the Upper St. Francois Mountains Management Area (also known as Lower Rock Creek) to meet, at a minimum, semi-primitive non-motorized ROS objectives, except for the Wolf Hollow Area, which may be managed for semi-primitive motorized objectives. (See Fredericktown Unit Map in Appendix H for delineation of Wolf Hollow Area.)**

## Management Prescription 2.1

### General Forest, Roaded Natural ROS

#### Theme

This prescription emphasizes multiple use resource objectives while allowing for the enhancement of natural communities, improvement of forest health conditions, and roaded natural recreation experiences.

Multiple use resource objectives provide a wide variety of goods, uses, and services including wood products, forage, other products, visual quality, developed and dispersed recreation opportunities, and habitat for a variety of terrestrial and aquatic wildlife, fish, and other biota.

Ecological subsections will serve as the framework from which to distribute management activities across the forest to meet the goals and objectives for this management prescription.

#### Goals

- Provide a variety of uses, products, and values by managing within the capability and resource potential appropriate to natural communities and the landscape.
- Manage terrestrial and aquatic natural communities to enhance and retain their characteristic ecological elements.
- Provide a wide diversity of habitats to meet the needs of plants, fish, and wildlife species distributed across the Forest.

#### Desired Condition

Vegetation consists of a variety of stand sizes, shapes, crown closures, and age structures in patterns that simulate the structural variability of natural communities. (See Appendix A, Table A-2.)

Areas exhibiting old growth characteristics comprise 8% to 12% of the management area.

Regeneration openings comprise 8% to 15% of each management area. From 1% to 5% of these regeneration openings are  $\leq 2$  acres in size.

Natural communities are distributed similar to historical vegetation patterns.

Recreational opportunities provide for interaction between users ranging from moderate to high depending on the specific location.

#### Standards and Guidelines

##### Terrestrial and Aquatic Habitat Management

Distribute regeneration openings across the landscape proportionately to ELT's and natural communities present in the area.

##### Recreation Management

##### Recreation Opportunities

**Manage area to meet, as a minimum, roaded natural ROS objectives.**

## Visual Management

All resource management activities shall meet, as the minimum, the Visual Quality Objectives displayed below:

**Table 3-4. Visual Quality Objective for Management Prescription 2.1.**

	Sensitivity Level and Distance Zone						3
	Most Sensitive		Sensitive		Least Sensitive		
Variety Class	fg1	mg1	bg1	fg2	mg2	bg2	
Distinctive-Class A	R	PR	PR	PR	M	M	M
Common-Class B	PR	M	M	PR	M	MM	MM
Minimal-Class C	PR	M	M	M	MM	MM	MM

*Distance Zones: fg-foreground; mg-middleground; bg-background*

*VQO: R-Retention; PR-Partial Retention; M-Modification; MM-Maximum Modification*

## Management Prescription 5.1

### Designated Wilderness

**NOTE: This prescription has not been revised. Management direction remains the same as in the 1986 Forest Plan.**

#### Theme

This prescription applies to Wilderness.

#### Goals

Administer Wilderness for use and enjoyment by people in a manner that leaves the areas natural characteristics unimpaired.

#### Desired Condition

Wildernesses provide outstanding opportunities for solitude and primitive or unconfined types of recreation. They may contain exceptional ecological situations or features of scientific, educational, scenic, or historic value. Plant and animal diversity will depend entirely on the forces of nature. Vegetation ranges from glades to central hardwoods, mixed hardwood/shortleaf pine and shortleaf pine forests. Animals will predominantly be species that are associated with late successional stages of vegetation. No motorized use will be permitted except as authorized by Law and Regulation. Access will normally be by horse or foot traffic only. There will normally be no developed facilities other than trails. No transmission lines, pipelines, or other facilities will be permitted, except as authorized by law. Interaction between users will be low. Evidence of other uses and man's work will be substantially unnoticeable. Mineral exploration requiring surface disturbance is not permitted. Any private rights within these areas will be acquired when available. A brief description of the conditions of each Wilderness upon designation is given below.

**Table 3-5. Description of wilderness areas.**

Wilderness Area Name	Net Acres	Ranger District	Designation Date
Hercules Glades	12,314	Ava	10/19/76
Bell Mountain	8,777	Potosi	12/22/80
Piney Creek	7,927	Cassville	12/22/80
Rock Pile Mountain	4,159	Fredericktown	12/22/80
Devils Backbone	6,595	Willow Springs	12/22/80
Paddy Creek	6,728	Houston	01/03/83
Irish	16,500	Doniphan	05/21/84

#### Hercules Glades Wilderness

The Hercules Glades Wilderness is within the geological sub-province called the Springfield Plateau. It is characterized by cherty dolomite rocks of Ordovician age. Some of the higher knobs are capped with Mississippian age limestones. The Ordovician Cotter Formation is the primary bedrock. Open glades are found on this formation. Elevations range from 700 feet where the Wilderness borders Beaver Creek, to 1340 feet near the old Hercules Fire Tower site. There are three high knobs that stand out from the other high ridges in the area: Upper and Lower Pilot Knobs, and Coy Bald.

Hercules Glades Wilderness is in the Cedar Glades ecosystem as defined by A. W. Kuchler.

The thinnest soils (Gasconade) have prairie vegetation, intermingled with eastern redcedar, smoke tree, winged elm, aromatic sumac, chinkapin, and post oak. As the soils become deeper (Opequon), larger trees dominate with a mixture of chinkapin oak, white ash, post oak, blackjack oak, and eastern redcedar. An oak and hickory association is found on the deeper Clarksville soils. There is a shortleaf pine plantation planted during the late 1930's.

The glade areas support grass species common to the great prairies. Big and little bluestem, Indian grass, prairie dropseed, sideoats grama and switch grass are common grasses with an occasional remnant of eastern gama grass occurring. Associated forbs include black-eyed susan, several species of cone flower, goldenrod, shooting star, Missouri primrose and prairie clover. Common shrubs and vines are aromatic sumac, supplejack, and redbud.

Most wildlife found in the glade country is commonly found in the Hercules Glade Wilderness. In the Ozarks, many of these species are only found in the glade country because of their relation to the prairie grass communities. Examples of these species are the collared lizard, stinging scorpion, roadrunner, and the Bachman sparrow.

The Long Creek drainage generally runs east to west through the middle of the Wilderness. Portions of Long Creek contain water all year.

Evidence of man's activities remain in the form of 41 miles of woods roads, numerous house foundations, two spring houses, rock fences, concrete spring tanks, watering ponds and some wire fencing.

There is a three-acre tract of private land within the Wilderness in Section 8, Township 23N, Range 18W. Access to this tract is through the Wilderness.

The Hercules Glades is the only "Class 1" airshed on the Forest.

### Bell Mountain Wilderness

Bell Mountain Wilderness is part of the St. Francois Mountains, one of the oldest landforms in North America. Elevations range from 1,702 feet at Bell Mountain to 970 feet in the Joe's Creek drainage. Local relief is about 600 feet and is characterized by steep felsite and rhyolite outcroppings. Both Bell Mountain and Lindsey Mountain are located within the Wilderness and offer outstanding views of the surrounding area. The associated granite glades provide a variety of interesting plant and animal life.

The area is within the oak-hickory-pine ecosystem as delineated by A. W. Kuchler. Oak and hickory are the predominant tree species with some areas of natural oak-pine and some shortleaf pine plantations. Upland brush and redcedar make up a small portion of the vegetative component. Blackjack oak, winged elm, hickories, sumac, and natural grasses are found on the rock exposure. Lichens abound on the exposed surface rock.

In 1980, it was estimated that one percent of the Wilderness was classified as open.

Shut-in Creek crosses the area. It is a perennial spring-fed stream with several "shut-ins" or gorges along its course. Steep talus slopes intersect the stream course at several locations. Joe's Creek is another small perennial stream within the Wilderness.

The wildlife in the area is typical of the Missouri Ozarks. Present populations are at moderate levels. Big game consists of white-tailed deer and wild turkey. Small game animals include squirrels and rabbits. Bird life ranges from large birds such as hawks, owls, turkey, vultures, and pileated woodpeckers to the small songbirds.



Evidences of man's activities can be seen. There are three miles of unimproved road and more woods roads. A utility line crosses the area for .96 miles. Wildlife ponds are scattered throughout. The foundation of an old fire tower and a mine tunnel entrance can be seen. Silver was once mined along Shut-in Creek.

There is a 40-acre and a 10-acre tract of private land within the boundary. Right-of-way through the Wilderness to these private ownerships exists.

### **Piney Creek Wilderness**

The Piney Creek Wilderness has a deeply dissected landform with narrow ridge tops separated from narrow hollows by long, steep slopes. The ridge tops are approximately 400 feet above the streams. The area is underlain by limestone formations. Piney Creek, about five miles long, is the principal stream and the entire watershed is within the Piney Creek Wilderness. Piney Creek flows easterly into the James River arm of Table Rock Reservoir. Small springs can be found along Piney Creek. In the early part of the year, the intermittent drainages carry surface water run-off before drying up in late summer.

Piney Creek is within the cedar glades ecosystem as delineated by A. W. Kuchler. A variety of vegetation exists within the area. The ranges of many species of flora converge in this area. Influences from western, eastern, northern, and southern types exist. Some varieties are at the limits of their natural ranges. The area is ninety-nine percent forested, with oaks and hickories being the chief species. Black, red, white, post, and blackjack oaks, as well as other varieties, can be found. Other hardwoods such as sycamore, ash, and walnut occur on benches in the drainage. Shortleaf pine and redcedar are also present.

The Corps of Engineers has control over a 43-acre parcel along Piney Creek that is within the flood pool of Table Rock Lake.

Access to several private ownerships along Table Rock Lake is through the Wilderness.

The wildlife is typical of the Missouri Ozarks. Big game consists of white-tailed deer and wild turkey. Small game animals include squirrel, rabbit, coyotes, bobcat, fox, and raccoon. Bird life ranges from hawks, owls, turkey vultures, herons, and pileated woodpeckers, to the smaller songbirds. The roadrunner, a bird of the southwest, and the collared lizard, also common to the southwest, are residents of the area.

Evidence of man's activities can be seen in the form of 29 miles of woods roads, 9 wildlife ponds, 2 stock watering tanks, 1.5 miles of utility right-of-way along the boundary, some cross fencing, and some old fields in the flatter drainages.

### **Rock Pile Mountain Wilderness**

The Rock Pile Mountain Wilderness is within the St. Francois Mountains portion of the Ozarks, one of the oldest landforms in North America. Rounded granite knobs overlying dolomitic limestone at lower elevations is the usual topography. Ridges are steep with rocky, wide slopes. Rock Pile Mountain is primarily a broken ridge running from Little Grass Mountain on the north to the National Forest boundary four miles to the south. Elevations range from 1,305 feet to 520 feet. Local relief is about 600 feet. The only public access is by the Faro Tower road on the north. The Wilderness is almost entirely surrounded by private land.

Scenic attractions include Rock Pile Mountain itself, the steep limestone bluffs, rock formations, and caves along the St. Francis River, the narrow gorges or "shut-ins," and the scattered granite glades with their own unique plant and animal communities. The mountain takes its name from an ancient circle of granite rocks piled by some earlier man on the top of the mountain.

The area is within the oak-hickory-pine ecosystem as delineated by A. W. Kuchler. Oak and pine trees dominate with hickory, redcedar, and miscellaneous hardwood species composing a relatively small component of the total vegetation. Mixed hardwoods of walnut, sugar maple, and basswood exist in a moist ravine.

No natural permanent water exists except for the St. Francis River, which touches the Wilderness along the southwest corner. Water in the drainages is intermittent, flowing in times of surplus precipitation. Runoff becomes a torrent in some of the small streams following periods of heavy rainfall because of the rapid runoff from the areas of steep rock. A few small springs exist. Five wildlife ponds provide a man-made source of year-round water.

The wildlife within the area is typical of the Missouri Ozarks. Big game consists of white-tailed deer and wild turkey. Small game animals include squirrels, rabbits, and various fur bearers.

Bird life ranges from owls, turkey vultures, and pileated woodpeckers to the smaller songbirds. Existing signs of man's activities include 15 miles of woods roads, wildlife ponds, wildlife food plots, and remains of a stone and concrete springhouse.

There are 40 acres of private land in one tract within the Wilderness boundary.

### **Devils Backbone Wilderness**

Devils Backbone Wilderness is characterized by rugged topography with narrow ridges and hollows separated by long, steep slopes or bluffs. It takes its name from a geologic feature within the boundary - a long, narrow ridge known since early settlement as the Devil's Backbone. Elevations range from 1,020 feet to about 680 feet along the North Fork of the White River which flows through the Wilderness for approximately 1 ½ miles.

The area is within the oak-hickory ecosystem as delineated by A. W. Kuchler. A heavy forest cover of oak, hickory, and shortleaf pine predominates. A variety of vegetation exists, including an abundance of smaller trees, shrubs, grasses, and herbaceous plants. Wild azaleas occur along the North Fork River. There are small-scattered limestone glades.

The principal water feature is the North Fork of the White River, a high quality stream. Blue Spring, McGarr Spring, and Amber Spring are permanent water sources. The natural water in the area is of very high quality. Eighteen manmade wildlife water holes provide a source of water in upland areas where natural water sources are deficient.

The wildlife species are the typical forest-associated species found throughout the Ozarks. This includes white-tailed deer and eastern wild turkey as big game species. Smaller species include fox, raccoon, bobcat, skunk, squirrel and rabbit as well as lesser species. Beaver, muskrat, and other water-associated species can be found along the North Fork River.

Bird life ranges from hawks, owls, turkey vultures, and pileated woodpeckers to the small songbirds. Ruffed grouse inhabit the area. Blue heron, green heron, and other water-associated birds are found along the North Fork River.

The North Fork River provides a good stream fishery of large and smallmouth bass and smaller fish. In addition, it contains rainbow and German brown trout.

Canoeing is a popular use.

Evidence of man's activities can be seen in the form of 24 miles of woods roads, wildlife ponds, wildlife food plots, and segments of utility right-of-ways.

### Paddy Creek Wilderness

The Paddy Creek Wilderness is located in the Salem Plateau region of the Ozarks, with its characteristic rolling topography. Within the area itself, streams cutting through the plateau have exposed sedimentary bedrock formations of sandstone and limestone, creating a dissected, rugged area. Elevation ranges from 1,480 feet to 900 feet. Local relief is about 250 feet.

This area is within the oak-hickory-pine ecosystem as delineated by A. W. Kuchler. The vegetation of the area is predominantly that of a forest community composed of red and white oaks, hickories, and shortleaf pine. There are 109 acres of scattered grass-covered openings and old fields along the creeks.

The area is drained by Big Paddy and Little Paddy Creeks, which converge within the Wilderness. They are both perennial streams. There are approximately 53 small springs that feed the two streams.

The wildlife is typical of the Missouri Ozarks. Big game consists of white-tailed deer and wild turkey. Small game animals include squirrels, rabbits, fox, and bobcat. The streams attract water-associated species such as mink and beaver. Several beaver colonies are present.

Bird life ranges from hawks, owls, turkey vultures, and pileated woodpeckers to the smaller songbirds.

Evidence of man's activities remain in the form of 28 miles of woods road, a segment of utility line and water line, wildlife ponds, wildlife food plots, and fencing. Fourteen miles of the Paddy Creek Trail are within the area, as well as 1.9 miles of a nature trail.

There are 40 acres of private land in one tract within the Wilderness boundary.

### Irish Wilderness

This 16,500-acre area in the Ozark Highlands is characterized by a rolling to steep topography with many karst features such as sinkholes, disappearing stream segments, and caves. White's Creek Cave, one of the significant karst features, is a spacious walk-in cavern about 900 feet long, which contains numerous crystalline formations. Elevations in the area range from 900 to 500 feet.

The Wilderness lies in the oak-hickory-pine ecosystem as delineated by A. W. Kuchler. The predominant plant community is oak-hickory forest with scattered shortleaf pine and a great variety of ground vegetation. The few river bottom silt-loam soils have some black walnut and associated bottomland species. The shallow glade soils in the unit support patches of tall grass, prairie plants, and eastern redcedar. The forest vegetation is in a variety of age classes. The majority of the trees are about 30 to 40 years old. In rough areas, a few old growth stands exist.

The Wilderness abuts the Eleven Point National Scenic River corridor for approximately seven miles.

Intermittent streams are characteristic of the unit. White's Creek is the principal stream and is partially intermittent with some permanent pools. Streamflow generally moves into the underground drainage system to emerge at the numerous small springs of the region.

Wildlife species are typical of the Missouri Ozarks with both forest and upland game represented. Big game species include white-tailed deer and the eastern wild turkey. Huntatable populations are present. Gray squirrels are the most popular small game animals. Also, there are rabbits, raccoons, foxes, coyotes, bobcats, and beaver. Lesser species of wildlife such as

weasels, and mice fill various niches in the total ecological system. Birdlife ranges from larger birds such as hawks, owls, turkey vultures, and pileated woodpeckers to smaller songbirds.

Evidence of man's activities include 41 miles of woods roads, 1.4 miles of utility right-of-ways, the masonry remnants of an old Civilian Conservation Corps camp and railroad grades. The Whites Creek Trail, 19.4 miles in length, traverses the area.

There are 240 acres of private land within the boundary. Right-of-way to this land exists through the Wilderness.

## Standards and Guidelines

### Vegetation Management

Vegetation will be affected by forces of nature with few minor exceptions as identified by these guidelines.

Control of noxious farm weeds by grubbing or with chemicals when they threaten lands outside Wilderness or are spreading within the Wilderness, provided control can be affected without serious adverse impacts on Wilderness values.

**No man-caused vegetative manipulation will be permitted beyond the minimum needed for trails and signs. Exceptions are: (1) physical facilities and uses permitted under the establishing legislation, (2) vegetation may be removed to control man-caused wildfires and those natural wildfires and insect and disease outbreaks which threaten to spread beyond the Wilderness, (3) vegetation may be removed when absolutely necessary for rescue operations.**

When approved by the Regional Forester thru a change in, or exception to, National Wilderness Policy, prescribed fire will be used where it can be determined that a certain frequency of fire is essential to aid, maintain, or restore natural plant communities or threatened and endangered plant species.

**Existing vegetation communities, for example, legumes, food plots, fescue pastures, or pine plantations, which differ from the natural communities for a particular site, shall be allowed to revert to natural vegetation communities.**

**Only native or naturalized species and natural materials will be used for restoration work.**

### Environmental Management

#### Air Quality

**Protect Hercules Glades Wilderness as the only Class I air quality area on the Forest.**

In cooperation with the State identify and quantify the indicators for Class I air quality to be used as the limits of acceptable change (LAC) for Air Quality Related Values (AQRV). This LAC will then be incorporated into the monitoring of the Hercules Glades Wilderness.

**Protect Piney Creek, Devils Backbone, Bell Mountain, Paddy Creek, Irish, and Rock Pile Wildernesses as Class II air quality areas.**

### **Pesticide Use**

Use pesticides in Wilderness only when necessary to prevent the loss of significant aspects of the Wilderness or to prevent significant losses to resource values on private or public lands bordering the Wilderness.

**Obtain Regional Forester approval for all pesticide applications in Wilderness.**

### **Catastrophic Hazard Response**

Accept the effects of flood, wind, pests, erosion, and other natural forces as part of the Wilderness experience and environment except as needed to prevent unnatural loss of the Wilderness resource; unacceptable damage to resources on adjacent lands; or pose a threat to continued use and activities of the area.

## **Rangeland Management**

**Grazing will not be permitted.**

## **Recreation Management**

### **Recreation Opportunities**

**Apply ROS class Primitive to Wilderness.** Within ROS class Primitive, the Wilderness Opportunity Spectrum (WOS) will be used to stratify each Wilderness into units for application of different management actions to preserve a range of Wilderness opportunities and options for users. Reference Wilderness Maps found at the end of this Management Prescription.

Transition WOS will be characterized by the following:

- Evidence of past use.
- Solitude in proximity to trails interrupted by sometimes frequent party encounters.
- Opportunities for challenge, risk, and self-reliance available but must be actively sought along trail.
- High level of on-site public safety (well defined and marked trails with necessary signing since a low level of woodsmanship skills is assumed).
- High degree of public information.
- High degree of ranger and public contact.
- Facilities to protect resource.
- Visual Quality Objective of Retention.

Remote WOS will be characterized by the following:

- Evidence of past use.
- Solitude in proximity to trail interrupted on occasion by encounters with other parties.
- Opportunities for challenge, risk, and self reliance available in off-trail areas and at most times along travel corridors.
- Moderate level of on-site public safety.
- High degree of public information.

- Moderate degree of ranger and public contact.
- Facilities to protect resource.
- Visual Quality Objectives of Preservation or Retention.

Pristine WOS will be characterized by the following:

- Little or no evidence of past use.
- Solitude seldom interrupted by contacts with other parties.
- Opportunities for challenge, risk and self reliance found throughout area.
- Low level of on-site public safety.
- Low degree of public information.
- Low degree of ranger and public contact.
- No facilities.
- Visual Quality Objective of Preservation.

**The limit of acceptable change concept will be implemented by evaluating the following indicators:**

**Table 3-6. Indicators of acceptable change.**

Categories	Indicators	Standards
Trails (Biological)	Soil loss	An increase in excess of 0.3 square foot per year in cross sectional area.
Water (Biological)	Quality reduction	A measurable decrease from current quality.
Visitor Contact (Social)	Exit contact will be made in the spring and fall. A total of six days will be used including a holiday and different weekdays.	20% or more with a negative impression.
Use (Social)	Annual report.	Reach 50% of capacity.

When any of the above standards are reached, an assessment will determine the causes and possible remedies to prevent the loss of Wilderness character.

**Motorized equipment and mechanized transport for recreation use is prohibited.**

Regulation of use may be necessary where demand exceeds carrying capacity, where needed to prevent site deterioration, or to maintain WOS classification. A permit system may be implemented as a last resort if necessary to hold use within established limits.

The use of self registration is permissible.

**No more than 10 individuals shall travel or camp together as one group. Camping will be permitted anywhere except within 100 feet of a trail, water, cave, rock shelter, other occupied campsite, or other areas as designated that are easily impacted by or subject to concentrated use.**

Off-trail horse and mule use is permitted in Wilderness.

**Horse and mule use of trails is limited to those designated for such use as shown on the Wilderness maps.**

**Tying stock directly to live trees is prohibited.**

**Horses or mules will not be picketed within 100 feet of water or trails.**

**Limit recreation facilities to trails and signs consistent with Wilderness character, except as otherwise authorized by the act establishing the area.**

**Camping conveniences such as toilets, tables, fire rings, hitch racks, or corrals, will not be provided.**

## **Trails**

The planned trail system for each Wilderness is shown on its map.

Construct tread only if required to delineate trails, protect fragile adjacent resources, correct poor alignment or location, or to route user away from hazardous areas. All of the proposed trails are either existing “woods roads” or have already been constructed. Deviations will be made when justified on a case-by-case basis.

### **Major trailhead development will be limited to:**

Hercules Glades:	Tower Site
Devils Backbone:	North Fork Campground
Irish:	Camp Five Pond Whites Creek Float Camp
Paddy Creek:	Paddy Creek Campground Roby Lake Big Piney Trail Camp

### **Minor trailhead development will be limited to:**

Hercules Glades:	Blair Ridge West Side Access
Piney Creek:	Piney View Tower South Side Access
Devils Backbone:	Northwest Access South Access
Bell Mountain:	A Highway FT-12 Access
Rock Pile Mountain:	Little Grass Mountain

### **Trailhead facilities will be located outside Wilderness.**

At major trailhead locations, minor additional facilities may be developed to provide parking, toilets, camping, picnicking, horse facilities, and signing.

**Development at minor trailhead locations will be limited to parking, minimum signing, and minor facilities to accommodate use.**

**Trail identification will only be provided at termini and road or trail intersections.**

**Signs primarily for the convenience of visitors such as extensive direction, information, interpretation, and mileage will not be provided.**



Signs should be as small as possible using  $\frac{3}{4}$ " or 1" letters and 1 line preferred with 3 lines the maximum. The materials used will not detract from the Wilderness experience.

**Utilize off-site techniques for use control such as guides, maps, brochures, or travel logs.**

#### **Off-Road Vehicles (ORV)**

**ORV use will not be permitted.**

### **Heritage Resources**

Heritage resources are available for scientific study. Study or management will not normally include any excavation, restoration, or interpretation activities.

Heritage resource values may be stabilized and preserved when these values are compatible with and enhance Wilderness values.

### **Visual Management**

Attain Visual Quality Objective (VQO) of Preservation for each Wilderness.

**Man-caused impacts or improvements will meet the Visual Quality Objective of Retention (R).**

Visual Absorption Capacity (VAC) assessments for ecological landtype will be utilized in guiding locations of authorized impacts or improvements to minimize environmental impacts and costs.

### **Timber Management**

#### **Silvicultural Systems**

Silvicultural systems are not applicable to this management prescription.

#### **Harvesting**

**Timber is not harvested under this management prescription.**

#### **Management Intensity and Utilization**

Use growing trees as sources of natural gene pools.

Scions and seed may be collected by methods compatible with Wilderness.

Superior trees will not receive any special treatment that noticeably disturbs the surrounding vegetation or draws undue attention to them.

### **Water and Soil Resource Management**

**There will be no investment for soil productivity improvement.**

Man-caused accelerated soil erosion will be controlled. The preferred method shall be to remove the cause and let the forces of nature repair the damage. Where this method is not satisfactory measures such as natural appearing site hardening or revegetation with appropriate species shall be used.

**In those unusual situations where mechanical equipment is used any soil disturbance that reasonably cannot be expected to heal itself through the forces of nature within three years will be immediately restored.**

Design all soil-disturbing activities to limit degree of duration of disturbances to the capability of the soil to recover.



Promptly restore areas of disturbed soil using appropriate naturalized plants and materials where necessary to prevent unacceptable adverse impacts on downstream areas and adjacent landowners.

**No Forest Service activity shall degrade water quality below that level characteristic of the undisturbed Wilderness.**

Where water quality unsuitable for Wilderness enters the area from outside, the situation will be referred to the Missouri Department of Natural Resources for resolution.

## Wildlife Habitat Management

### Wildlife

In some instances, wildlife species once native to the Wilderness have been forced from their original habitat by the encroachment of man and his activities. To the extent that these factors can be altered or managed within the intent of the Wilderness Act, species no longer part of the Wilderness scene may be reintroduced and managed as a part of the Wilderness resource when recognized by both the Forest Service and the Missouri Department of Conservation.

Wildlife habitat and plant and animal diversity may be manipulated for endangered or threatened species as permitted by legislation.

### Fish

The Forest Service role in fish management is habitat protection and coordination with the Missouri Department of Conservation.

### Endangered, Threatened, and Sensitive Species

Manage threatened and endangered species as warranted within the provisions of enabling legislation.

**Projects involving manipulation of vegetative cover shall be approved by the Chief of the Forest Service on a project-by-project basis. All projects must have, as their objective, enhancement of the Wilderness resource. To qualify for approval habitat manipulation projects must satisfy:**

- **The project can be accomplished with complete assurance that damage to watershed or Wilderness values of serious or lasting nature will not develop.**
- **There is reasonable assurance that the project will accomplish the desired objectives.**
- **The condition to be remedied is a result of man's influence.**
- **The project will promote the perpetuation of a threatened or endangered species.**

## Special Use Management

### Utility Transmission Corridors

**Corridors for reservoirs, water conservation works, power projects, transmission lines, and other facilities are not permitted.**

### Other Special Uses

**Commercial use will not be permitted. Special uses will not be permitted, except for access to surrounded private property.**

## Minerals

### Mineral Exploration

**Surface disturbing exploration (including core drilling) is not permitted, subject to valid existing rights.**

### Mineral Development

**Mineral development is not permitted.**

## Research

Research to investigate scientific values may be conducted providing it is in accordance with the concept of Wilderness.

Where possible, research projects will be directed to areas outside Wilderness where similar sites are available.

## Fire Management

Reference Forestwide Standard and Guidelines 2100 for Air Class I Maintenance Requirements.

**The Forest Supervisor must approve the use of motorized equipment, including chain saws and mechanical transport, except tractors.**

**The Regional Forester must approve the use of tractors for fire suppression.**

**Evidence and damage resulting from vehicle travel will be obliterated or repaired as a cost of the fire.**

The suppression strategy of control will be used for any wildfire with flame lengths in excess of four feet (fire intensity level 3+).

In the Hercules Glades, during either high or low damage period as stated in the Fire Management Action Guide and as modified by silviculturists, the suppression strategy of containment will be used for any wildfire with flame lengths of less than four feet (fire intensity level 0-2).

In other Wildernesses, during the high damage period as stated in the Fire Management Action Guide and as modified by silviculturists, the suppression strategy of containment will be used for any wildfire with flame lengths of less than three feet (fire intensity level 0-1). The suppression strategy of control will be used for any wildfire with flame lengths of three to four feet (fire intensity level 2).

## Law Enforcement

Perform law enforcement in a manner that does not detract from the Wilderness experience of others.

## Land Ownership

Acquisition of inholdings, outstanding subsurface rights, and adjacent tracts suitable for Wilderness will receive high priority when they become available from willing sellers.

**Acquired inholdings and suitable adjacent lands, which would provide a more logical boundary, will be managed as Wilderness until they are classified as such by Congress.**

Individuals and their successors in interest, who own land surrounded by Wilderness shall be given rights as may be necessary to ensure adequate access to that land. Adequate access is defined as the combination of routes and modes of travel which will, as determined by the Forest Service, cause the least lasting impact on the Wilderness resource, and at the same time serve the reasonable purposes for which the private land is held or used.

Property boundary lines separating Wilderness and private lands should be surveyed to standard. Line marking will be done in a manner that identifies the location while maintaining a visually pleasing setting.

### **Buildings and Structures**

**No buildings or structures will be constructed, except as authorized by the act establishing the Wilderness.**

### **Public Health and Pollution Control Activities**

#### **Water Supply**

**Drinking water sources will not be developed.**

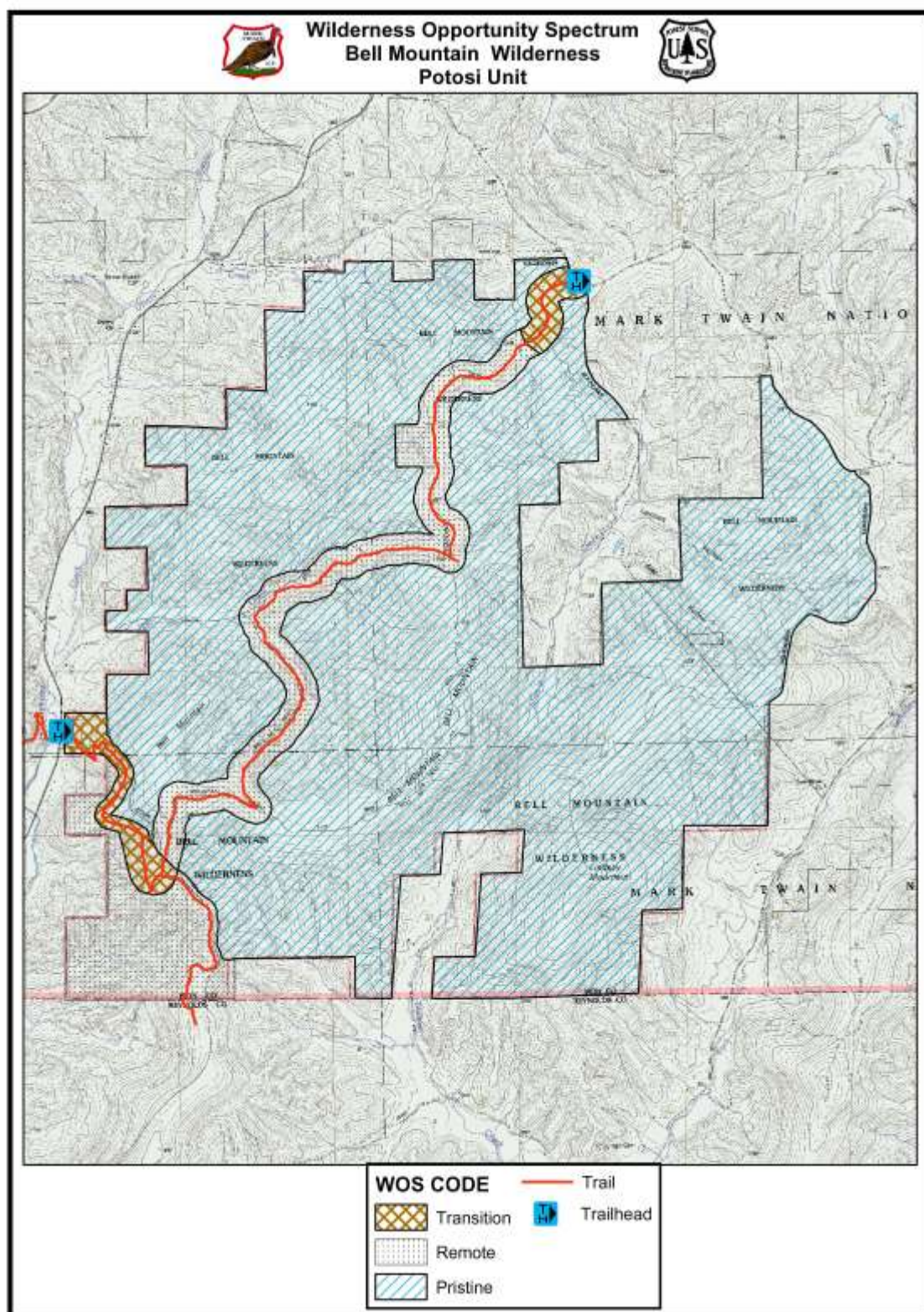
#### **Solid Waste**

**Landfill disposal sites will not be provided.**

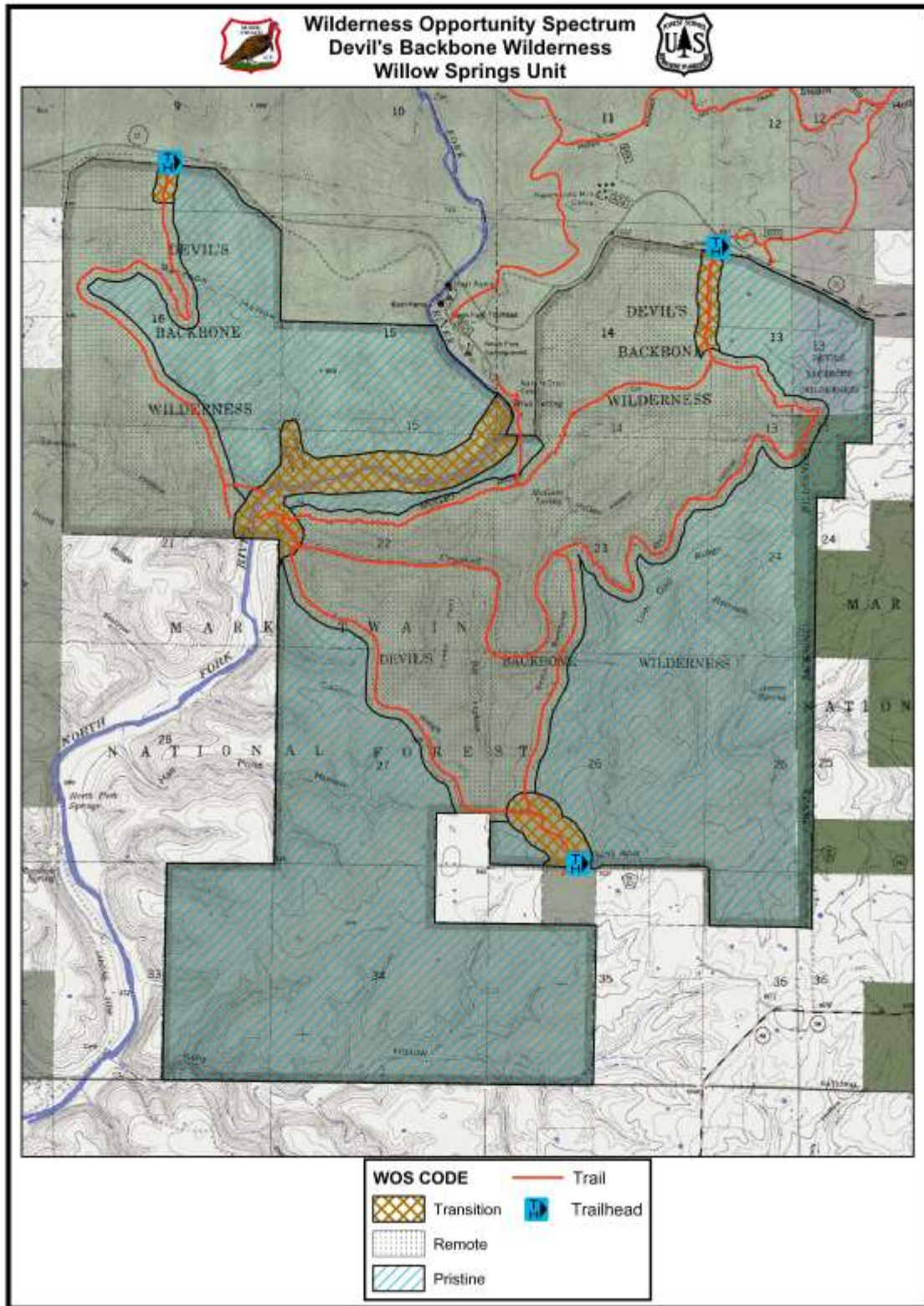
### **Transportation System**

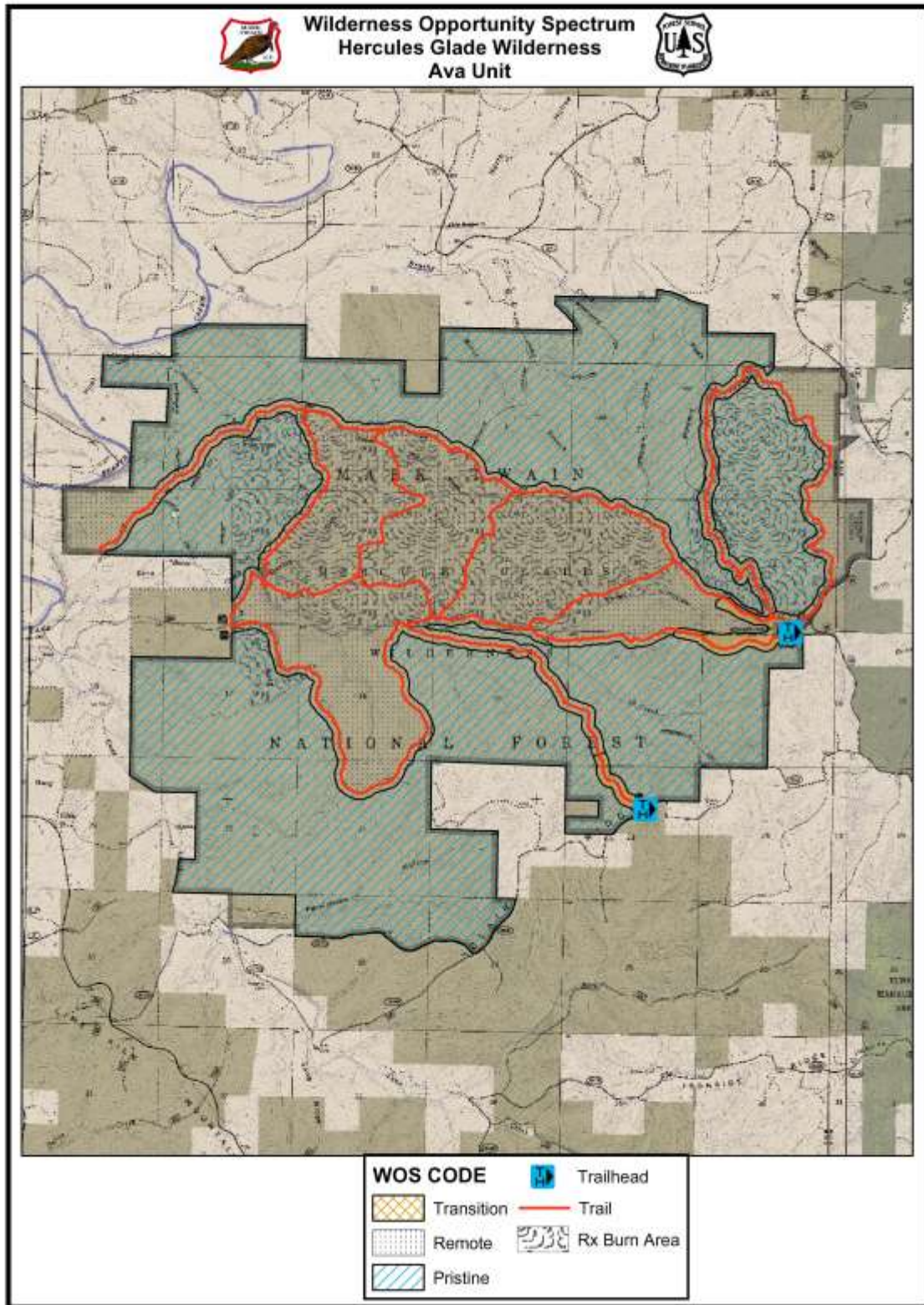
**Roads will not be provided, except as required by the act establishing the Wilderness.**

**Maintenance of authorized roads will be at the minimum level necessary to protect the resource and accommodate the authorized use.**

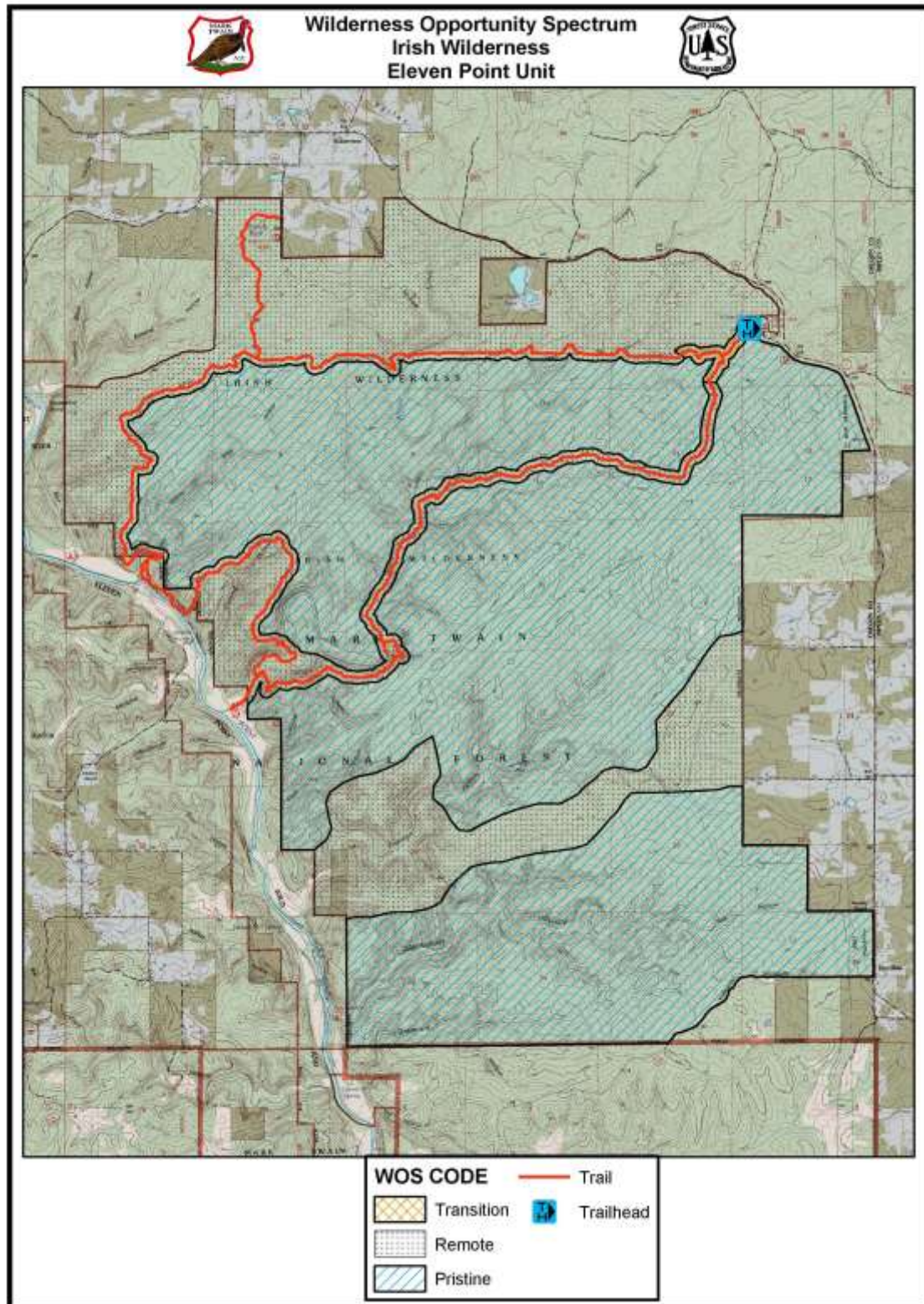


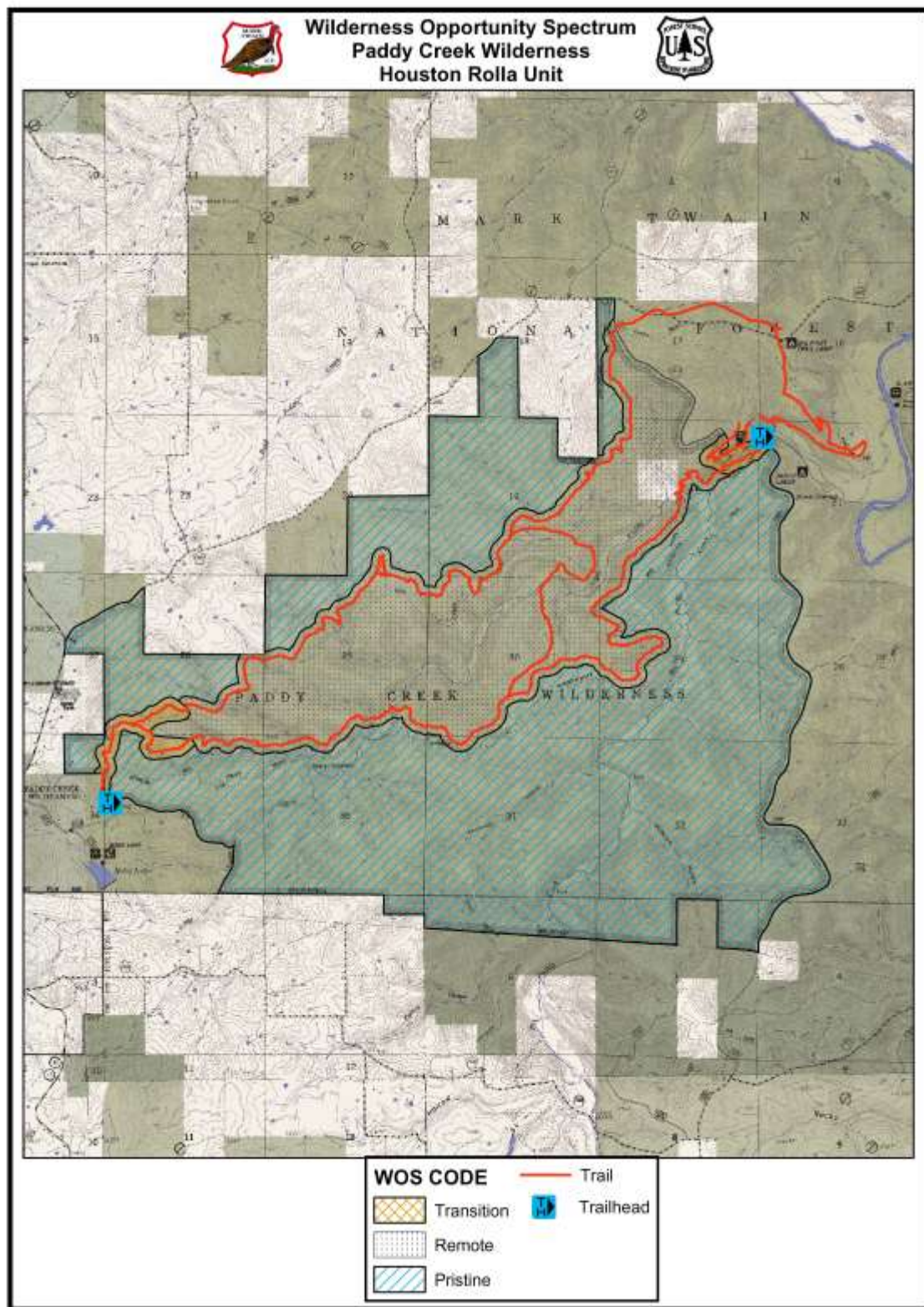




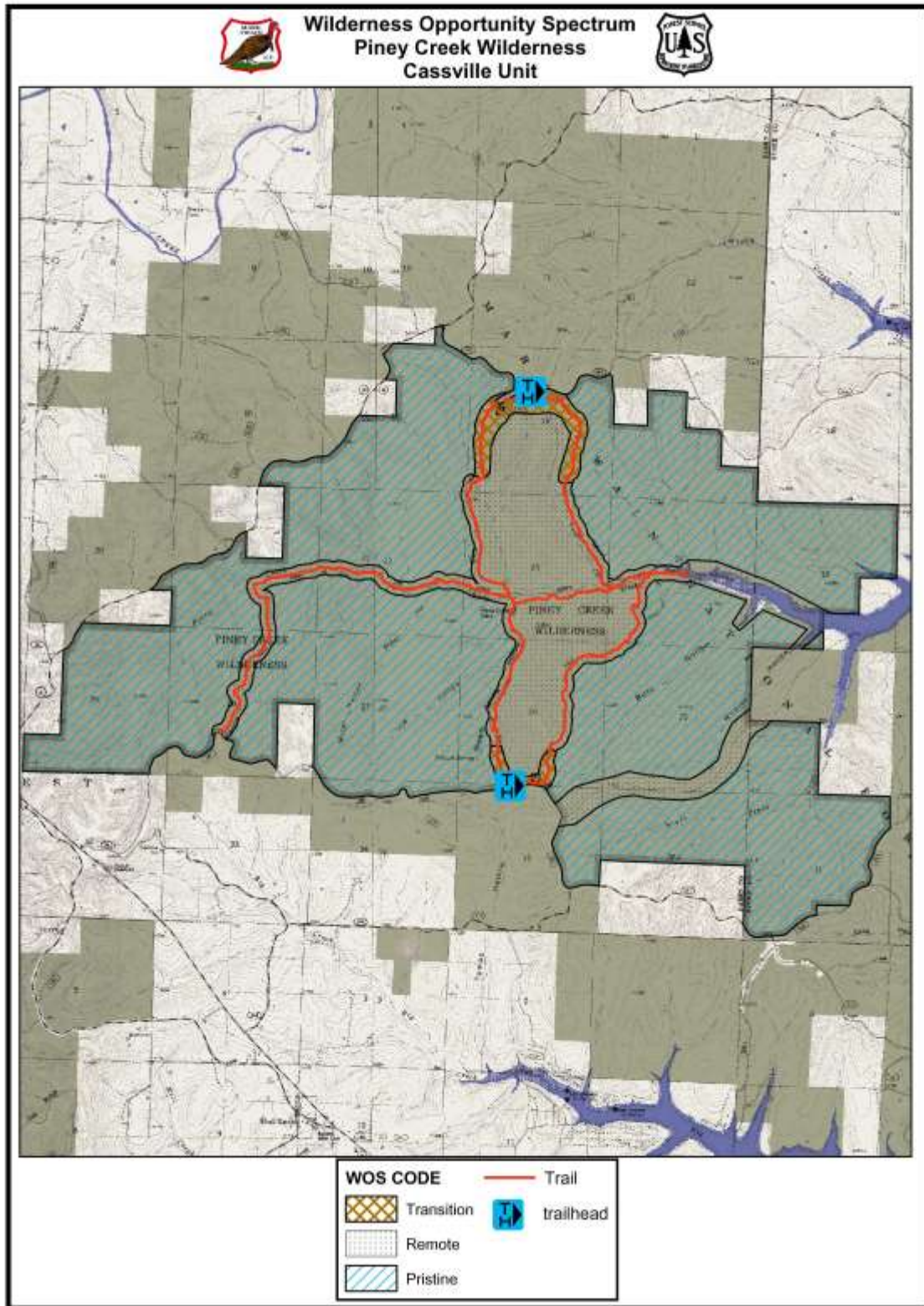




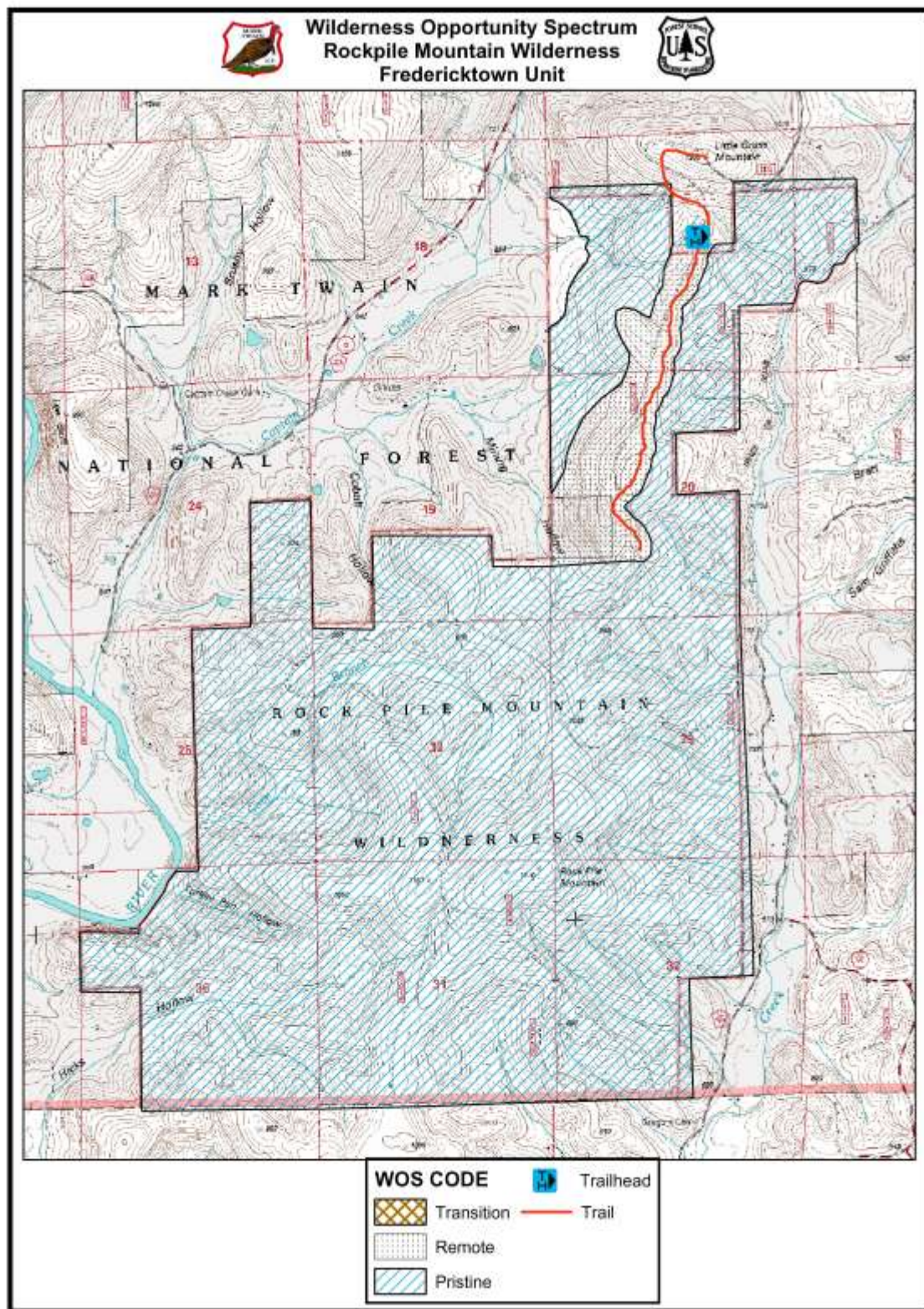












## Management Prescription 6.1

### Semi-Primitive Non-Motorized ROS

#### Theme

This prescription features management of natural vegetative communities under limited investments to provide nonmotorized semi-primitive dispersed recreation.

#### Goals

Manage natural vegetative communities under limited investment.

Provide wildlife habitat diversity common to managed natural communities.

Provide dispersed recreation opportunities emphasizing Semi-Primitive Nonmotorized ROS objectives.

Provide for low to moderate production of other resources such as timber products, fish and wildlife, and forage where they do not substantially limit natural vegetative community management opportunities or dispersed semi-primitive non-motorized recreation objectives.

#### Desired Condition

These forest areas, normally 2,500 acres or larger, provide semi-primitive non-motorized recreation experiences, with emphasis on access by foot or horse trails.

There is no motorized vehicular access for recreational activities, and access for project activities is limited to temporary roads and skid trails. Existing roads not subject to existing rights or authorized exceptions are closed and allowed to revert to a natural condition.

Woody vegetation increases in abundance, age, and size across the landscape. Vegetation composition and structure for savannas, open woodlands and some glades may succeed to that which is different from their known historical condition, although their appearance may still look natural. (See Appendix A, Table A-2.)

Areas exhibiting old growth characteristics comprise 15% to 20% of each management area, and regeneration openings comprise 1% to 5% of each management area.

The natural-appearing setting has subtle modifications that could be noticed but would not draw the attention of an observer wandering through the area.

There are few, if any, facilities, structures, utility corridors, and developments.

Mineral activities are coordinated with other surface values.

#### Standards and Guidelines

##### Vegetation Management

**Do not maintain existing vegetation communities that differ from the natural communities for a particular site (for example legumes, food plots, fescue pastures, or pine plantation).**

**Limit investments for vegetation management treatments to those necessary for restoration and/or maintenance of natural communities, or provides a specific resource output.**

## Terrestrial and Aquatic Habitat Management

Maintain existing waterholes.

**Do not construct new waterholes within the of Swan Creek, Smith Creek, Van East Mountain, west Lower Rock Creek, Spring Creek, North Fork, and Big Springs Addition areas.**

Distribute regeneration openings across the landscape proportionately to ELT's and natural communities present in the area. Sizes of openings should encompass the full range from ¼ to 15 acres.

## Rangeland Management

**Design natural grassland community management practices to enhance the visual, recreational, and wildlife values.**

**Invest only at low levels for grassland management.**

**Use livestock grazing only to maintain structural and/or species diversity on native grassland communities.**

## Recreation Management

### Recreation Opportunities

**Manage area to meet, as a minimum, semi-primitive non-motorized ROS objectives.**

### Recreation Management

**Hold investment in recreation management to the minimum necessary to meet resource protection needs**

### Trails

Density for all types of trails should not exceed an average of 1.5 miles per square mile of National Forest System land. An exception is made for the Smith Creek Area, Cedar Creek Ranger District, where the trail density should not exceed an average of 2.4 miles per square mile of National Forest System land.

**Motor vehicle trails are prohibited.**

## Visual Management

**All resource management activities shall meet, as the minimum, the Visual Quality Objectives displayed below:**

**Table 3-7. Visual Quality Objectives for Management Prescription 6.1.**

	Sensitivity Level and Distance Zone						
	Most Sensitive		Sensitive		Least Sensitive		
Variety Class	fg1	mg1	bg1	fg2	mg2	bg2	3
Distinctive-Class A	R	R	R	PR	PR	PR	PR
Common-Class B	R	PR	PR	PR	M	M	MM
Minimal-Class C	PR	PR	M	M	M	MM	MM

*Distance Zones: fg-foreground; mg-middleground; bg-background*

*VQO: R-Retention; PR-Partial Retention; M-Modification; MM-Maximum Modification*

## Timber Management

### Harvesting

**Schedule no more than 10% of an individual management area for timber harvest during each decade of the Plan period.**

Salvage harvests are not subject to the 10% limit on timber harvest.

**All lands within Swan Creek, Smith Creek, Van East Mountain, west Lower Rock Creek, Spring Creek, North Fork, and Big Springs Addition areas are classified as unsuitable for timber management.**

**If applying the uneven-aged system, use the group selection harvest method with openings ranging from 0.25 to 2 acres in size.**

Improvement cuts may be made to achieve stand structure objectives when applying the uneven-aged silvicultural system.

### Temporary Openings Created by the Application of Even-aged Silviculture

**The maximum size of a temporary opening created by even-aged management is 15 acres.**

**Temporary openings are not permitted within 100 feet of a trail.**

### Management Intensity and Utilization

Emphasize achieving large stem size on lands managed under the uneven-aged silvicultural system.

## Special Use Management

**Permit facilities, structures, utility corridors, and developments only if subject to existing rights, or within existing sites or corridors.**

## Minerals

### Mineral Exploration

Minimize excavation at drill sites.

### Common Variety Minerals

Removal of common variety minerals should generally not be permitted.

## Transportation System

### Roads

**Close and revegetate roads.**

**Permanent roads are prohibited except as follows:**

- FR 516 (Loving Ridge Road) in Swan Creek to provide for high water access to adjacent private landowners. Open road to public use during modern firearm deer season.
- FR 498 to provide access to the Carroll Cemetery in the Spring Creek area.
- FR 2245 (Johnson Mountain Road). Gate road at the point it enters the 6.1 management area.



**Manage National Forest System roads to meet the semi-primitive nonmotorized ROS criteria.**

**National forest system roads have a maintenance level no higher than 2. Limit road maintenance to those activities needed to prevent resource degradation within the area. Do not provide maintenance intended to provide for vehicle user comfort.**

These roads should have limited access to protect the non-motorized setting.

### **Buildings and Structures**

Buildings and structures should not normally be provided in support of resource management objectives.

## Management Prescription 6.2 Semi-Primitive Motorized ROS

### Theme

This prescription features the management of natural vegetative communities under limited investments to enhance the semi-primitive motorized dispersed recreation experience.

### Goals

Manage natural vegetative communities and their successional stages under limited investment.

Provide wildlife habitat diversity common to managed natural communities.

Provide dispersed recreation opportunities emphasizing Semi-Primitive Motorized ROS objectives.

Provide for low to moderate production of other resources such as timber products, fish and wildlife, and forage where they do not limit natural vegetative community management opportunities or dispersed semi-primitive recreation objectives.

### Desired Condition

These areas, normally 2,500 acres or larger, provide a semi-primitive motorized environment. Recreational opportunities provide for interaction between users ranging from low to moderate. There is limited motorized vehicular access for recreational activities.

Stand composition will somewhat reflect the character of historical natural communities with the landscape dominated by variable age tree species. The environment may be natural appearing, but structural characteristics of specific natural communities will be different than their known historical condition. (See Appendix A, Table A-2.)

Areas exhibiting old growth characteristics comprise 8 to 12% of each management area, and regeneration openings comprise 5% to 10 % of each management area.

The natural appearing setting has moderately dominant alterations, but these alterations do not draw the attention of motorized observers from trails or primitive roads.

Only those facilities, structures, utility corridors, and developments subject to existing rights are present.

### Standards and Guidelines

#### Vegetation Management

**Do not maintain existing vegetation communities, which differ from the natural communities for a particular site (for example legumes, food plots, fescue pastures, or pine plantation).**

**Limit investments for vegetation management treatments to those necessary for restoration and/or maintenance of natural communities, or provides a specific resource output.**

## Terrestrial and Aquatic Habitat Management

Distribute regeneration openings across the landscape proportionately to ELT's and natural communities present in the area. Sizes of openings should encompass the full range from ¼ to 15 acres.

## Rangeland Management

**Design natural grassland community management practices to enhance the visual, recreational, and wildlife values.**

**Invest only at low levels for grassland management.**

**Use livestock grazing only to maintain structural and/or species diversity on native grassland communities.**

## Recreation

### Recreation Opportunities

**Manage area to meet, as a minimum, semi-primitive motorized ROS objectives.**

### Recreation Management

**Invest in recreation management only at minimum necessary to meet resource protection needs.**

### Trails

Density for all types of trails should not exceed an average of 1.5 miles per square mile of National Forest System land.

## Visual Management

**All resource management activities shall meet, as a minimum, the Visual Quality Objectives displayed below:**

**Table 3-8. Visual Quality Objective for Management Prescription 6.2**

	Sensitivity Level and Distance Zone						
	Most Sensitive		Sensitive		Least Sensitive		
Variety Class	fg1	mg1	bg1	fg2	mg2	bg2	3
Distinctive-Class A	R	R	R	PR	PR	PR	PR
Common-Class B	R	PR	PR	PR	M	M	MM
Minimal-Class C	PR	PR	M	M	M	MM	MM

*Distance Zones: fg-foreground; mg-middleground; bg-background*

*VQO: R-Retention; PR-Partial Retention; M-Modification; MM-Maximum Modification*

## Timber Management

### Harvesting

**Prescribe no more than 20% of an individual management area for harvest during the 10 year Plan period.**

Salvage harvests are not subject to the 20% limit on timber harvest.



**Temporary Openings Created by the Application of Even-aged Silviculture**

**Limit the size a temporary opening created by even-aged management to a maximum of 15 acres.**

**Temporary openings must be a minimum of 100 feet from recreation trails.**

**Special Uses**

**Allow the use of National Forest System lands only when subject to existing rights, within existing sites or corridors, or when no other alternative is available.**

**Minerals****Mineral Exploration**

**Minimize excavation at drill sites.**

**Common Variety Minerals**

**Permit removal of common variety minerals only from isolated, visually screened locations.**

**Transportation System**

**Manage National Forest System roads to meet, as a minimum, the semi-primitive motorized ROS criteria.**



## Management Prescription 6.3

### Candidate Wild, Scenic, Recreation Rivers

#### Theme

This prescription provides management for rivers identified as eligible for inclusion in the National Wild and Scenic Rivers System (NWSR).

#### Goals

Manage eligible rivers to maintain or enhance their outstandingly remarkable values, free-flowing character, and potential for recommended classification.

#### Desired Condition

Rivers eligible for National River status are managed under the provisions for National Scenic and Recreation River classification. The unique attributes of the eligible rivers are maintained or enhanced. Facility development is the minimum necessary to reach the objective and designed so as not to preclude the rivers eligibility. Evaluations of projects on, directly affecting or invading the corridors or diminishing the Outstandingly Remarkable Values of these river segments adhere to the guidance of the Interagency Wild and Scenic Rivers Coordination Council.

#### Standards and Guidelines

##### Scenic and Recreation Segments Classification

The management area boundaries for rivers in the 6.3 prescription are normally defined as National Forest System lands extending 0.25 mile in width from each bank of the river.

The following table lists those rivers located within the Forest boundaries that are identified as eligible for inclusion in the National Wild and Scenic Rivers System (NWSR), along with their best potential classification and outstandingly remarkable values by segment.

**Table 3-9. Eligible Rivers located within forest boundaries.**

River	Best Potential Classification	Segment	Segment Reach Description	Length (Miles)	Outstandingly Remarkable Values*
Gasconade	Scenic	1	State Highway O to Ozark Spring	66	S,R,G,F,W
Big Piney	Scenic	1	State Highway 17 Sec.31, T35N, R10W	52	S, R, G, F, W
	Scenic	3	North boundary of Ft. Leonard Wood to Sec.31, T36W, R10W	11	S, R, G, F, W
Black River	Recreation	1	Markham Springs recreation area to south district boundary	16	H, F
Huzzah Creek	Recreation	1	Entire length within Mark Twain N.F. boundary	28	H
North Fork of White River	Recreation	1	Mile Posts 18 to 30	12	F, W
St. Francis	Scenic	1	Entire length within Mark Twain N.F. boundary	17	S, R, G, H

\*Outstandingly Remarkable Values: S=scenery (includes landform, vegetation, water features [color, type of flow, water quality]), R= recreation (includes span of attraction [local, regional or national]), water sports, exceptional interpretive opportunities) G=geology, F=fish, W=wildlife, P=prehistory, H=history, O=other e.g. botanical or ecological.

Manage National Forest System lands associated with eligible river corridors to perpetuate their outstandingly remarkable values. Management activities may enhance conditions but must not degrade the present characteristics below the standards for the best potential classification as shown above.

Rivers not eligible for inclusion in the NWSR will continue to be managed as recreation segments in order to protect an outstanding or remarkable feature are Cedar Creek, Courtois Creek and the first eighteen miles of the North Fork of the White River (beginning at the district proclamation boundary).

## **Recreation Management**

### **Recreation Opportunities – Scenic Segments**

Manage area to meet, as a minimum, semi-primitive non-motorized ROS objectives.

### **Recreation Opportunities – Recreation Segments**

Manage area to meet, as a minimum, roaded natural ROS objectives.

### **Recreation Management – Scenic Segments**

Prohibit construction of major public use areas.

Prohibit substantial additions to existing improvements or structures.

### **Recreation Management – Recreation Segments**

Provide recreation facilities as needed to protect the values of the river area and facilitate public use, in keeping with a natural setting.

Additions to existing improvements and structures are allowed.

## **Visual Management**

### **Scenic Segments**

Design management activities to meet, as a minimum, a Visual Quality Objective of Retention or Partial Retention to maintain current characteristic landscape.

### **Recreation Segments**

Design management activities to meet, as a minimum, a visual Quality Objective of Retention or Partial Retention, with the exception of specific sites developed to accommodate public use, which shall not drop below a VQO of modification for the impacted area.

## **Timber Management**

### **Scenic and Recreation Segments**

These areas are not included in the suitable timber base.

Harvest no timber within the floodplain portion of the river corridor except as a tool to augment natural community restoration or for forest health.

Timber management must not detract from the outstandingly remarkable values of the river.

Use the uneven-aged silvicultural system for timber management within river corridors to the extent possible.

**Timber management practices must not be visually apparent to over water travelers or users of developed facilities.**

**Confine management activities in the river corridor to the period of October 1 to March 31.**

### Special Uses Management

#### Scenic and Recreation Segments

Do not issue new special uses authorizing the construction of buildings or structures unless there is no reasonable alternative.

**Modify existing permits to insure existing structures and improvements are maintained in a manner compatible with the river environment and the outstandingly remarkable values.**

**Allow redesign and reconstruction of existing special use buildings and structures only when needed to meet public safety objectives or protect resource needs.**

### Mineral Exploration

#### Scenic and Recreation Segments

Provide constraints on surface disturbing exploration (including core drilling) as needed to protect the outstandingly remarkable values of rivers.

**Design mineral exploration activities so they are not visually apparent to over water travelers or users of developed facilities.**

**Confine mineral exploration activities to the period of October 1 to March 31.**

### Mineral Development

#### Scenic and Recreation Segments

**Include a stipulation in mineral development leases to prohibit surface disturbance or occupancy for development and extraction of federally owned minerals.**

**Prohibit surface coal mining.**

### Water Storage and Transmission Management

#### Scenic and Recreation Segments

**Allow no new dams, diversion works or other structures within portions of the waterway under National Forest jurisdiction.**

### Transportation System

#### Scenic and Recreation Segments

**Construct and reconstruct roads and bridges only for uses that are permitted by the Wild and Scenic River Act, and as needed to meet public safety objectives and protect resources.**

**Limit road construction not associated with recreation development to temporary roads.**

Avoid constructing temporary roads that parallel the river.

#### Scenic Segments

**Manage National Forest System roads to meet, as a minimum, the semi-primitive motorized ROS criteria.**



## Management Prescription 7.1

### Developed Recreation Areas

#### Theme

This prescription provides management for the following developed recreation areas: Council Bluff, Sutton Bluff, Big Bay, Shell Knob, Watercress, Markham Springs, Pinewoods, Cobb Ridge, Pine Ridge, Lane Spring, Marble Creek, Loggers Lake, and North Fork.

#### Goals

Emphasize recreation activities such as camping, picnicking, group activities, and other recreation opportunities.

Recognize existing recreation facilities and the future need to provide sites for highly developed recreation intended to serve various user groups.

Encourage development of interpretation and environmental education opportunities.

#### Desired Condition

Recreation areas have motorized access and a moderate to high level of developed recreation facilities and structures that may dominate the landscape. These areas have a substantially modified natural environment. Resources are modified and used primarily to enhance specific recreational activities and to maintain vegetative cover and prevent soil loss. Surrounding areas provide complementary recreation opportunities such as hiking, boating, fishing, and/or trail riding. These recreation areas are characterized by the Rural ROS classification.

The areas vary in size and ownership patterns. The recreation emphasis continues and the Forest meets public demand for a variety of developed recreation opportunities. Design buildings, materials, and placement of facilities to visually blend with the environment. Developed recreation facilities are safe for visitors and may be accessible to visitors with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 (Section 504). Areas remain open for use on a regular seasonal or year-round basis, as determined by Forest policy.

Cleaning, mowing, and other needed maintenance is done on a regular and frequent basis. Facilities that are worn or vandalized are replaced or rehabilitated as needed. Maintenance and rehabilitation are prompt and thorough.

Utility corridors and other special uses, if present, are compatible with the character of the area. The vegetation is managed to ensure that the safety and attractiveness of the area continues throughout the anticipated life of the development. Large numbers of users are present, human sights and sounds are evident, and a high degree of interaction between users is expected.

Interpretation emphasizes environmental education, heritage resources and National Forest management.

Depending upon the site and level of development, a wide variety of quality outdoor recreation activities compatible with the forested environment are available either in the developed area or immediately adjacent.

## Standards and Guidelines

### Public Involvement Programs

Provide orientation and informational signs, brochures, and maps as needed in recreation areas.

### Vegetation Management

Manage vegetation as needed to meet wildlife viewing, recreation, safety, and visual quality objectives. Strive for mature trees with minimum risk for hazards or blow down.

**Retain only healthy, sound trees, considering recreation benefits (shade, screening, etc) and safety of visitors.**

Encourage a conifer component in hardwood ecosystems for diversity and color contrast. .

Landscaping projects in recreation areas may use a wide variety of plant materials, including non-native species, (providing these are not problematic invasives), although the use of native plants is preferred.

### Water and Soil Resources Management

Reference Forest wide standards and guidelines for Recreation Management for additional direction related to activities in RMZ and WPZ

### Environmental Management

**Use pesticides only to reduce hazards to the public or to treat non-native invasive species.**

Apply pesticides during periods of low visitor use when possible.

### Rangeland Management

**Design forage management practices (excluding grazing) to enhance recreation values and be compatible with the recreation use.**

### Recreation Management

#### Recreation Opportunities

**Manage area to meet, as a minimum, rural ROS objectives.**

#### Recreation Management

Locate recreational developments by giving priority to correcting health and safety problems, protecting the environment, complementing prescribed recreation opportunities, and meeting public demand.

Provide access control and greater visitor safety by designing developments with a single gated entry/exit road when possible.

**Restrict public motor vehicle use to designated roads and trails, unless otherwise provided for by law, regulation, or special area management objectives for each area.**

As much as possible, design sites to be pedestrian oriented, with pathway access from one facility to another as convenient as possible.

Temporarily close recreational developments when needed to allow for site rehabilitation.



Details of operation and maintenance work are found in area operation and maintenance plans.

### **Trails**

**Sign all trails to ensure customers are aware of the type of use allowed: foot travel, pack or stock, mountain bicycles, motorized use or other types of conveyance.**

### **ATV/OHV Use**

**Prohibit ATV/OHV use in these areas, with the following exceptions:**

- **Travel between designated ATV/OHV trails and developed campsites or parking areas,**
- **Administrative use, access by emergency vehicles or use authorized by permit of contract, or**
- **On designated motorized trails or in accordance with State or County law and regulations.**

### **Visual Management**

**Design resource management activities to visually blend with the environment.**

### **Timber Management**

**This management area is not included in the timber base.**

**Allow commercial timber management activities only during off-season or when facilities are closed to public use.**

### **Special Uses**

Routinely permit only those facilities that are required to serve recreational or administrative needs. Consider exceptions on an individual basis. Encourage development of special uses that will enhance the availability of quality recreation opportunities within the area, in response to public service needs.

### **Minerals**

**Prohibit surface disturbing mineral activities.**

**Protect the character of the recreation sites by applying constraints on non-surface disturbing mineral activities. Consider hours of operation, season of operation, noise levels, protection of facilities, and public safety.**

### **Public Health and Water Supply**

Drinking water should normally be available at these sites during peak operating seasons.



## Management Prescription 8.1

### Designated “Special Areas” Other Than Wilderness

#### Theme

This prescription describes a variety of designated “special areas” other than Wilderness. They exist for the protection of unusual environmental, recreational, cultural, or historical resources, and for scientific or educational studies. New areas may be added to this prescription as they are evaluated.

#### Goals

Protect and appropriately manage areas of special scientific, biological, historical, ecological, geological, scenic, recreational, and educational significance.

Provide low to moderate production of other resources such as timber products, fish and wildlife, recreation, and forage where they are compatible with “special area” objective.

Maintain or enhance the outstandingly remarkable values within the Eleven Point National Scenic River. The outstandingly remarkable values include scenic (water features, landforms, and vegetation), recreation (national attraction, water sports), fishing, wildlife, prehistoric and historic resources, and geology.

Provide a variety of recreational opportunities with interactions between users ranging from low to high depending on the specific locations and ROS objectives.

#### Desired Condition

Officially classified areas of exceptional ecological, geological or other features of scientific, educational, scenic, or historical values (other than Wilderness) are protected. Such areas include designated Experimental Forests, Research Natural Areas, State Natural Areas, Heritage Resource Areas, National Trails, National Rivers, National Forest Scenic Byways, the Greer Spring Special Management Area, and other Forest Special Areas identified as having unique significance.

Vegetation management varies based on the specific management objective for each area. Management activities, facility development or motorized use are present only if compatible with area objectives. Interaction between users varies from high to low, based on the area objectives. Mineral activities requiring surface disruption do not normally occur.

Timber program outputs are low. The Sinkin Experimental Forest may provide some timber outputs.

## Standards and Guidelines for All Areas in Management Prescription 8.1

These standards and guidelines apply to all areas in Management Prescription 8.1. They are followed by additional standards and guidelines specific to individual areas.

#### Vegetation Management

Manipulate vegetation to meet the intent of the law, order, or agreement designating the area.

## Terrestrial and Aquatic Habitat Management

**Limit habitat manipulation to restoration or enhancement of natural communities or the needs of threatened, endangered, rare or sensitive species and species of conservation concern.**

## Rangeland Management

Normally do not allow rangeland management on these areas due to their unique or special significance.

## Special Areas

Areas having national recognition as of January 2005, other than Wildernesses, are:

**Table 3-10. Areas with National recognition and designation.**

Designation	Area	Unit
National Forest Scenic Byways	Blue Buck Knob	Willow Springs
	Glade Top Trail	Ava
	Sugar Camp	Cassville
National Recreation Trails	Berryman Trail	Potosi
	Crane Lake Trail	Fredericktown
	Ridge Runner Trail	Willow Springs
	*Ozark Trail	Multiple*
National Register of Historic Places	Decker Cave	Rolla
	Nova Scotia	Salem
	*Greer Mill	Eleven Point*
National Scenic River	Eleven Point River	Eleven Point
National Natural Landmark	Cupola Pond (also State Natural Area)	Doniphan
	Greer Spring (also Special Management Area)	Eleven Point
Society of American Foresters Natural Area (Open Glade)	Hayden Bald	Ava

Specific standards and guidelines for each of these nationally recognized areas are provided in this management prescription.

**Table 3-11. State Natural Areas as of July \*\*2012\*\*.**

Area	Unit
Bald Hill	Doniphan
Big Barren Creek	Doniphan
Blair Creek Raised Fen	Salem
Brushy Pond	Eleven Point
Butler Hollow Glades	Cassville
Carman Springs	Willow Springs
Coward's Hollow	Doniphan
Cupola Pond	Doniphan
Grasshopper Hollow Fen	Salem
Haney Pond	Doniphan
Hayden Bald	Ava
Marg Pond	Eleven Point
Mud Creek	Poplar Bluff
Overcup Oak Sink	Eleven Point
Red Maple Pond	Doniphan
Solomon Hollow Glades	Rolla
Tunnel Bluff Woods	Doniphan
Tupelo Gum Pond	Eleven Point
Wells Branch Fen	Doniphan
**Western Star Flatwoods	Houston/Rolla**

Coordinate selection of additional State natural areas with the Missouri Natural Areas Committee based on selection criteria, site design quality, geographic representation, and management needs.

Standards, guidelines, and management area objectives for each officially designated State Natural Area on the MTNF should normally be developed as part of the natural area nomination and are part of Forest Plan designation.

Specific management objectives and/or recommendations included in the natural area nomination take precedence over the general Management Prescription 8.1 direction.

Place and maintain signs at major points of public entry as needed, and where appropriate to delineate natural area boundaries.

Forest Special Areas are recognized as having unique features, but do not have national and State recognition. Emphasize protection and maintenance of the unique characteristics of the site in the management of these areas.

**Set the management area boundary for sinkholes designated as 8.1 at least 50 feet to the outside of the crest or divide of the surface drainage basin of the sinkhole or complex of sinkholes.**

**Table 3-12. Forest Special Areas as of January, 2005**

<b>Area</b>	<b>Unit</b>
<b>Fens</b>	
Bidwell Creek Bog	Fredericktown
Kaintuck Hollow Fen	Rolla
Mayfield Spring Wet Meadow	Houston
Medley Hollow Hanging Fen	Salem
Barton Fen	Potosi
Bates Hollow Fen	Salem
Blue Flag Fen	Eleven Point
Clear Creek Fen	Potosi
Swamp Hollow Fen	Salem
Wash Creek Alder Bog Fen	Fredericktown
Wet Hollow Fen	Salem
<b>Sinkholes and Sinkhole Ponds</b>	
Bear Pond	Eleven Point
Camp Eight Pond	Eleven Point
Charcoal Pond	Eleven Point
Dammed Sinkhole Pond	Eleven Point
Flat Pond	Eleven Point
Fox Pond	Eleven Point
FS Road 4147 sinkhole	Eleven Point
Grassy Pond	Eleven Point
Hwy C Sinkhole Pond	Eleven Point
King Sink	Rolla
McCormack Pond	Eleven Point
Mud Pond	Eleven Point
Old Kehres Pond	Eleven Point
Oldham Pond	Eleven Point
Otter Creek Ponds	Poplar Bluff



**Table 3-12. Forest Special Areas as of January, 2005**

<b>Area</b>	<b>Unit</b>
Pin Oak Pond	Eleven Point
Pine Pond	Eleven Point
Polecat Pond	Eleven Point
Tan Bark Pond	Eleven Point
Twin Ponds	Poplar Bluff
Victory Pond	Poplar Bluff
Whitten Church Pond	Eleven Point
Young Hollow	Eleven Point
Slaughter Sink	Rolla
The Gulf	Poplar Bluff
<b>Other Special Areas</b>	
Lower Current River	Eleven Point
Irish Wilderness Excluded Lands	Eleven Point
Recommended Wilderness Additions	Ava, Cassville, Rolla/Houston, Potosi, Fredericktown
Galloway Spring	Willow Springs
Indian Creek	Willow Springs
Natural Bridge	Rolla
Twin Sink Hollows	Willow Springs
Turtle Flatwoods	Salem
Pump Hollow	Poplar Bluff

## Recreation Management

### Recreation Opportunities

**Unless otherwise stated, manage for, as a minimum, roaded natural ROS objectives within these areas.**

### Recreation Management

**Keep investment in recreation facilities to the minimum necessary to protect the site, to meet development objectives, and to meet ROS classification objectives.**

### Trails

**Trails must be consistent with the special area management objectives.**

## Visual Management

**Provide for the protection of the unique visual qualities of each special area, consistent with the area's management objectives and the law, order or agreement of designation.**

**Unless modified by specific standards and guidelines for individual special areas, the Visual Quality Objectives are as follows:**

**Table 3-13. Visual Quality Objectives for Management Prescription 8.1.**

Type of Area	Visual Quality Objective
National Designation	As defined by specific standards and guidelines.
State Natural Areas	Retention
Forest Special Areas	Retention
Lands Excluded from Irish Wilderness.	Retention
Sinkin Experimental Forest	Use VQOs as specified for Management Prescription 2.1.
National Forest Scenic Byways	Retention
Recommended Wilderness Additions	Retention

### Timber Management

Normally do not schedule timber harvest in these areas; however, silvicultural methods may be appropriate in individual areas to restore or maintain desired ecological conditions or to meet law, order or agreement

### Special Uses Management

Normally, do not authorize special uses.

### Minerals

Normally do not allow surface disturbing mineral activities.

#### Common Variety Minerals

**Do not permit removal of common variety minerals from any area.**

### Research

As of January 2005, there is no designated Research Natural Areas (RNA) on the Forest.

The North Central Research Station guides management of the Sinkin Experimental Forest. The Forest will continue the same cooperative role with North Central Forest Experiment Station in carrying out research projects on the 4,127 acres within the Sinkin Experimental Forest.

### Land Ownership

The purchase of adjoining lands from willing sellers will be a high priority if needed to protect or enhance a “special area.”

### Buildings and Structures

**Limit buildings and structures within special area boundaries to those needed to support management objectives.**

## **Standards and Guidelines Specific to the Eleven Point National Scenic River**

A National Scenic River extending 44.4 miles in length on the Eleven Point River within the Eleven Point Ranger District. (Public Law 90-542).

Maintain or enhance the outstandingly remarkable values within the Eleven Point National Scenic River. The outstandingly remarkable values include scenic (water features, landforms, and vegetation), recreation (national attraction, water sports), fishing, wildlife, prehistoric and historic resources, and geology.

### **Terrestrial and Aquatic Habitat Management**

Normally do not manipulate vegetation within the Eleven Point National Scenic River corridor for wildlife habitat purposes, except to perpetuate unique natural ecosystems or manage habitats for threatened, endangered, sensitive species, or species of concern.

### **Rangeland Management**

**National Forest System lands in The Eleven Point National Scenic River corridor shall not be managed for rangeland forage production.**

### **Recreation Management**

#### **Recreation Opportunities**

**Manage area to meet, as a minimum, semi-primitive non-motorized ROS objectives in the terrestrial portion of the river corridor, except at developed motor vehicle facilities, which will be managed under semi-primitive motorized, roaded natural or rural ROS objectives, as determined by their development level. (See Table 3-14)**

**Manage for, as a minimum, semi-primitive motorized ROS objectives in the water travel zone of the river corridor.**

#### **Recreation Management**

See also Forestwide standards and guides for recreation in RMZs.

Limit visitor use control, if needed, to restrictions on the timing of entry at specific access locations during peak use periods only.

Encourage visitor use at lesser used access points, particularly in peak use periods.

**Provide vehicle access to the river at the following locations: Thomasville (FR3284), Cane Bluff (FR3189), Boom Hole (FR3155B), Greer Crossing (FR3188), Turner Mill North (FR3190), Turner Mill South (CR127), McDowell (FR4813), Whitten Church (FR4144), Riverton East (FR3285), and Highway 142 (FR3249). (See Regional Forester closure order, August 29, 1983.) Also provide vehicle access at Long Hollow (CR413), according to the Greer Spring Acquisition and Protection Act of 1991.**

**Use the following objectives for development level, ROS, and commercial use by outfitters when managing these vehicle access points.**

**Table 3-14. Objectives for development level, ROS, and commercial use by outfitters.**

<b>Access Point/Road</b>	<b>Recreation Development Level</b>	<b>ROS</b>	<b>Commercial Use</b>
Thomasville/FR3284	3	Roaded Natural	Yes
Cane Bluff/FR3189	3	Roaded Natural	Yes
Boom Hole/FR3155B	2	Semi-Primitive Motorized	No
Greer/FR3188	4	Rural	Yes
Turner Mill North/FR3190	2	Semi-Primitive Motorized	No
Turner Mill South/CR127	3	Roaded Natural	Yes
McDowell/FR4813	2	Semi-Primitive Motorized	No
Whitten Church/FR4144	2	Semi-Primitive Motorized	Yes
Riverton East/FR3285	4	Rural	Yes
Highway 142/FR3249	4	Rural	Yes
Long Hollow/CR413	2	Semi-Primitive Motorized	No

Manage the Boom Hole (FR3155B), Turner Mill North (FR3190), McDowell (FR4813), and Long Hollow (CR413) accesses to encourage use by those wishing to avoid high user densities.

**Keep facilities design to the minimum needed to protect the site and provide user needs at the least cost.**

**Design motor vehicle access points to provide vehicle parking in a manner that protects the river bank, screens the vehicle from the view of river travelers, facilitates authorized uses, and discourages tailgate camping.**

Allow dispersed camping on National Forest System lands throughout the river corridor, except within areas associated with motor vehicle access sites or where use would damage a specific site.

**Public camping is not allowed on private lands covered by scenic easement.**

If existing float camps are retained, allow them decline to the criteria for Semi-Primitive Motorized ROS classification (Development Level 1.)

**Do not develop new float camps.**

**Provide sanitation facilities within the river corridor only when needed for environmental protection.**

Manage vegetation in the riverbank zone as needed to assist in meeting dispersed use objectives. This may include measures to protect or prevent use in environmentally sensitive sites or to facilitate use of acceptable sites.

**Allow horse use outside of developed areas. Do not develop special horse use facilities in the river zone.**

**Keep signing to the minimum needed for user safety and area identification.**

**Prohibit any motorized vessel equipped with other than an outboard or electric motor.**

**Prohibit motorboats in excess of 25 horsepower (HP) or modified motors in excess of 25 HP as established by manufacturers rating.**

#### **Trails**

**Limit terrestrial trails within the Eleven Point National Scenic River corridor to non-motorized trails.**

**Limit use of the Greer Spring Trail to foot travel only.**

#### **Interpretive Services**

**Keep investments in site-specific interpretation to the minimum necessary to accomplish management prescription objectives.**

**Limit site interpretation to situations of high use or to protect the specific site.**

#### **Visual Quality**

**The portion of this special area within sight of access roads, developed sites, and water travelways are classed Sensitivity Level One Travelways.**

**Apply the Visual Quality Objective matrix for Management Prescription 6.2 – Variety Class A, to the entire river corridor.**

#### **Timber Management**

**These areas are not included in the suitable timber base.**

Implement timber management practices on National Forest System lands within the Eleven Point National Scenic River corridor only if needed for public safety, to enhance the outstandingly remarkable values, or for salvage which does not detract from river management objectives.

#### **Special Uses Management**

**Limit special use permits to canoe outfitter/guide permits.**

**Do not grant canoe outfitter permits for the use of Boomhole, McDowell, Turner Mill North, or Long Hollow access points.**

#### **Minerals**

**Permit mineral exploration within the Eleven Point National Scenic River corridor only if outside the area readily apparent to users of access roads, developed sites and over-water travel.**

**The 2,796 acres within the Scenic River Area corridor resulting from the Greer Spring Acquisition and Protection Act of 1991 is withdrawn by this Act from location, entry, and patent under the mining laws of the United States, and from the operation of the mineral and geothermal leasing laws of the United States.**

**Prohibit exploration operations on weekends or holidays from March 1 through the Thanksgiving Day weekend.**

Minimize excavation at drill sites.

**Prohibit drilling on slopes greater than 20%.**

Use existing openings when available. Allow cutting of brush and trees up to five inches diameter breast height. Cut stumps flush with the ground.

#### **Landownership**

An occupancy use reservation of 110 acres is reserved by Louis S. Dennig, Jr. and Marie Dennig Gildehouse and their descendents for a term ending 5/2/2013. (See warranty deed to the United States dated January 12, 1993, Book 289, page 70, Oregon County records.)

## Public Health and Water Supply

**Provide drinking water only at Greer Campground.**

## Transportation System

**Restrict public motorized access to the designated routes within the National Scenic River Area, as listed in the Regional Forester's Closure Order of August 29, 1983, and the Greer Spring Acquisition and Protection Act of 1991.**

### Regional Forester's Closure Order

The following roads are designated for public motor access:

Thomasville (FR3284), Cane Bluff (FR3189), Boom Hole (FR3155B), Greer Crossing (FR3188), Turner Mill North (FR3190), Turner Mill South (CR127), McDowell (FR4813), Whitten Church (FR4144), Riverton East (FR3285), and Highway 142 (FR3249).

### Greer Springs Acquisition:

Terminate Oregon CR 413 (located on the west side of State Highway 19) at a point that is not visible from the Eleven Point River.

Terminate FR 4149 (2.7 miles) (located on the east side of State Highway 19) at the wild and scenic river boundary NS 4149.

## Standards and Guidelines Specific to Decker Cave

Listed on National Register of Historic Landmarks as a National Archaeological Site of 82 acres located on the Rolla Ranger District.

## Rangeland Management

**Prohibit rangeland management.**

## Recreation Management

### Recreation Opportunities

**Manage area to meet, as a minimum, semi-primitive non-motorized ROS objectives.**

## Heritage Resources

**A minimum of four documented visits during different seasons of the year will be made to determine that no vandalism, unauthorized digging or collecting is being done.**

**Only the minimum number of signs necessary showing the area classification will be erected and maintained.**

## Visual Quality

**Manage this area to meet, as a minimum, the VQO of Retention.**

## Timber Management

**Prohibit timber management.**



## Standards and Guidelines Specific to Cupola Pond

A National Natural Landmark, SAF Natural Area and Missouri Natural Area of 160 acres located on the Doniphan Ranger District.

### Rangeland Management

Prohibit Rangeland management.

### Recreation Management

#### Recreation Opportunities

Manage area to meet, as a minimum, roaded natural ROS objectives

#### Recreation Management

Erect and maintain only the number of signs necessary to show the area classification.

Regulate visitor use if needed to protect this site from overuse or botanical collecting.

### Visual Quality

Manage this site to meet, as a minimum, a VQO of Retention.

### Timber Management

Prohibit timber management.

## Standards and Guidelines Specific to National Recreation Trails

The following are National Recreation Trails:

**Table 3-15. National recreation trails.**

Trail	Miles	District
Ridge Runner Trail	38	Willow Springs
Berryman Trail	24	Potosi
Crane Lake Trail	5	Fredericktown

### Recreation Management

#### Recreation Opportunities

Manage to meet, as a minimum, semi-primitive non-motorized ROS objectives within the trail corridor.

#### Recreation Management

Limit trailhead and parking area development to those currently established.

Prohibit campfires within 100 feet of the edge of the trail clearing.

Prohibit development of new facilities along trails.

Prohibit overnight camping at the Crane Lake recreation site.

Do not charge user fees for trail use.

## Trails

### **Prohibit motor vehicle use.**

“No Motor Vehicles” signs should be posted and maintained on the trail at every intersection with a system road open to the public.

### **Maintain trails to a level that complies with ROS objectives and provides for year around use.**

### **Trails must not coincide with any road except where they intersect.**

Assurance markers should be maintained.

## Visual Quality

### **Manage the National trails as Sensitivity 1 Travelways.**

## Timber Management

### **Limit logging activity to leaf off periods within the near foreground.**

### **Locate log decking areas so they are not visible from the trail.**

**Do not use trail as a skid trail or temporary logging road. Provide at least 600 feet between skid trails crossing the hiking trail, except where topography requires occasional approval of closer skid trails.**

### **Prohibit vehicles within the trail clearing except at approved trail crossings.**

Leave flowering and colorful vegetation species within the near foreground zone.

Where feasible, place paint marks used for identification of project work on the side of the tree away from the trail so marks are not visible from the trail.

## Standards and Guidelines Specific to Hayden Bald

A Society of American Foresters Natural Area and Missouri Natural Area of 40 acres located on the Ava Ranger District.

## Vegetation Management

### **Burn the site every 4 to 6 years.**

### **Maintain fence on all four sides of the site.**

## Recreation Management

### **Recreation Opportunities**

**Manage area to meet, as a minimum, semi-primitive non-motorized ROS objectives.**

### **Recreation Management**

**Limit access to foot travel.**

## Visual Quality

**Manage area to meet, as a minimum, a VQO of Partial Retention.**

## Standards and Guidelines Specific to the Lower Current River Special Area

Total River Length - 16 miles

Certain National Forest System lands (NFSL) in proximity to that portion of the Current River bounded on the north by the Ozark National Scenic Riverway and on the south by Doniphan, Missouri, are classified as a Forest Special Area. The management objective for selected National Forest lands along the 16-mile stretch of river is to protect and enhance the recreation experience of river users. Those lands include National Forest lands immediately adjacent to the river (approximately one-quarter mile back from either bank) and those more distant areas readily seen by river travelers.

### Terrestrial and Aquatic Habitat Management

**Do not manipulate vegetation for wildlife habitat purposes, except to perpetuate unique natural ecosystems or manage habitats for threatened or endangered species or species of concern.**

### Rangeland Management

**Permit grazing only on existing grazing allotments. No new allotments are allowed.**

### Recreation Management

**Recreation management takes precedence over other management activities.**

#### Recreation Opportunities

**Manage area to meet, as a minimum, semi-primitive motorized ROS objectives, except within the boundaries of developed recreation sites.**

**Manage each developed recreation area under the ROS class appropriate for the development level assigned, as show below:**

**Table 3-16. Recreation area, development level, and ROS.**

Recreation Area/Road	Development Level	ROS
Float Camp/FR 3210	3	Roaded Natural
Deer Leap/ FR 4349	3	Roaded Natural
Bay Nothing/FR 3140	2	Semi-Primitive Motorized

#### Recreation Management

**Hold investment in recreation facilities to the minimum necessary to protect the site and meet ROS classification objectives.**

### Visual Management

**Use the Visual Quality Objective Matrix for Management Prescription 6.2 - Variety Class A, Sensitivity Level One Travelways, for the portion of this special area within sight of access roads, developed sites and water travel. Apply the same matrix to other lands within this area, based on applicable sensitivity level.**

### Timber Management

**This area is not included in the suitable timber base.**

**Prohibit timber management practices except as necessary for public safety, response to special wildlife habitat needs, to enhance visual resources, or salvage.**

### Special Uses Management

Limit special use permits to canoe and tube outfitters and special river oriented events whenever possible.

### Minerals

**Prohibit mineral exploration within the area readily apparent to users of access roads, developed sites and over water travel.**

**Prohibit operations on weekends or holidays from March 1 through the Thanksgiving Day weekend.**

Minimize excavation at drill sites.

**Prohibit drilling on slopes greater than 20%.**

### Public Health and Water Supply

**Provide drinking water only at Float Camp campground and picnic area and Deer Leap campground.**

## Standards and Guidelines Specific to the Greer Spring Special Management Area

An area of approximately 4,098 acres established by the Greer Spring Acquisition and Protection Act of 1991 (P.L. 102-220.)

Manage this area in accordance with the Act and with provisions of law generally applicable to units of the National Forest System to the extent consistent with the Act.

### Recreation

#### Recreation Opportunities

**Manage area to meet, as a minimum, semi-primitive motorized ROS objectives.**

#### Recreation Management

**Allow hunting and fishing in accordance with applicable Federal and State law.**

Provide foot access to Greer Spring from a location along State Highway 19 in a manner that conforms to and lies lightly upon the natural terrain, environment, vegetation and soil. To the extent practicable, maintain the path in an unsurfaced condition.

### Timber Management

Allow the harvesting of timber only to control insects or disease, for public safety, for salvage sales, or to accomplish the objectives of the special management area, which are to provide for public outdoor recreation, to protect the natural, archaeological and scenic resources, and to provide for appropriate resource management.

To the extent practicable, conduct timber harvesting only by the individual tree selection method.

### Minerals

Lands within the special management area are withdrawn by the establishing legislation from location, entry, and patent under the mining laws of the United States, and from the operation of the mineral and geothermal leasing laws of the United States.

### Transportation System

Construct and maintain only those roads that are indicated on the map entitled “Dennig Property,” as a part of the Act.

Terminate Oregon CR 413 (located on the west side of State Highway 19) at a point that is not visible from the Eleven Point River.

Terminate FR 4149 (2.7 miles) (located on the east side of State Highway 19) at the wild and scenic river boundary NS 4149.

Provide access to such roads (as shown on the “Dennig Property” map), or to timber harvesting in such a manner as to minimize environmental impact.

Maintain roads to a minimum standard necessary to allow passage of two-wheel- drive vehicles, except under exceptional weather conditions.

## Standards and Guidelines Specific to National Forest Scenic Byways

Routes designated as scenic byways by the Chief of the Forest Service are covered under this management prescription. The primary objective for these routes is to enhance and protect the scenic condition along the near foreground and to regulate visual effect of some management activities beyond this buffer. A secondary objective is to interpret management activities within adjoining management prescriptions.

**Table 3-17. National Forest Scenic Byways**

Byway	Length	Segment	Unit	Jurisdiction	Date Designated
Blue Buck Knob	24.0	Begins at District boundary on State Highway 181, then on to State Route AP to its junction with State Highway 14.	Willow Springs	Missouri Highway and Transportation Department	12/21/92
Glade Top Trail	23.0	Begins at District boundary on FR 150 to junction with State Highway 125; On FR 147 from junction with FR 150 to junction with State Highway 95.	Ava	Mark Twain National Forest	7/14/89
Sugar Camp	28.1	Begins at District Boundary on State Highway 86 to junction with FR 197 on to junction with State Highway 112, then north on to District Boundary.	Cassville	Missouri Highway and Transportation Department and Mark Twain National Forest	11/3/95

Activities related to recreation, scenic quality, heritage resources travel and tourism will take priority within and adjacent to these routes. Other resource activities should enhance rather than detract from recreation or visual management.

## Standards and Guidelines Specific to the Irish Wilderness Excluded Lands

An area on the Doniphan Ranger District of approximately 1,220 acres set aside by Congress from the Irish Wilderness to permit mineral exploration. (Irish Wilderness Act of 1984, P.L. 98-289.)

Apply Management Prescription 5.1 Wilderness standards and guidelines common to the Irish Wilderness to this acreage except as modified for mineral exploration and development.

### Visual Quality

**Manage this area to meet, as a minimum, a VQO of Retention.**

### Minerals

**Permit surface disturbing exploration (including core drilling) on this acreage under Management Area 8.1 and Forest-wide mineral exploration standards and guides with the following modifications:**

- **Remove all cut vegetation to a designated area, or lop and scatter to a depth of no more than 18 inches.**
- **Cut stumps flush with the ground.**
- **Prohibit operations on weekends or holidays from March 1 through the Thanksgiving Day weekend.**
- **Allow drilling and associated activities and equipment only within the confines of the existing roads to the extent possible.**
- **Upon the discovery of favorable geology in a core sample, the District Ranger may authorize, on a hole-by-hole basis, drilling at an off-road site when dictated by geologic formations to prove up the discovery.**
- **Minimize excavation at drill sites.**
- **Prohibit exploratory drilling on slopes greater than 20 percent.**
- **Limit road rutting to a maximum depth of 4". Reclaim roads to an acceptable condition as soon as they serve their purpose.**
- **Limit the number of drill sites in use at any one time to no more than 6 drill sites per permit.**



## Standards and Guidelines Specific to Recommended Wilderness Additions

Parcels of lands have been acquired since the designation of five Wilderness areas within the Mark Twain National Forest. These parcels were part of the Forest Roadless Area Inventory and are proposed additions to the following Wilderness Areas.

**Table 3-18. Proposed additions to Wilderness Areas.**

Wilderness	Parcel Number	Acres	Unit
Bell Mountain	950501	200	Potosi
	950502	10	
	950503	20	
Hercules Glade	952101	40	Ava
	952102	20	
	952103	20	
Paddy Creek	950301	40	Rolla/Houston
	950302	160	
Piney Creek	952104	20	Cassville
Rock Pile Mountain	950504	40	Fredericktown
	950505	80	
Total	11 parcels	650	

In addition, the Lands Excluded from the Irish Wilderness, totaling 1,220 acres will also be recommended to remove the exclusion for minerals exploration.

**Apply Management Prescription 5.1 Wilderness standards and guidelines to these acreages, until recommendation process is completed.**